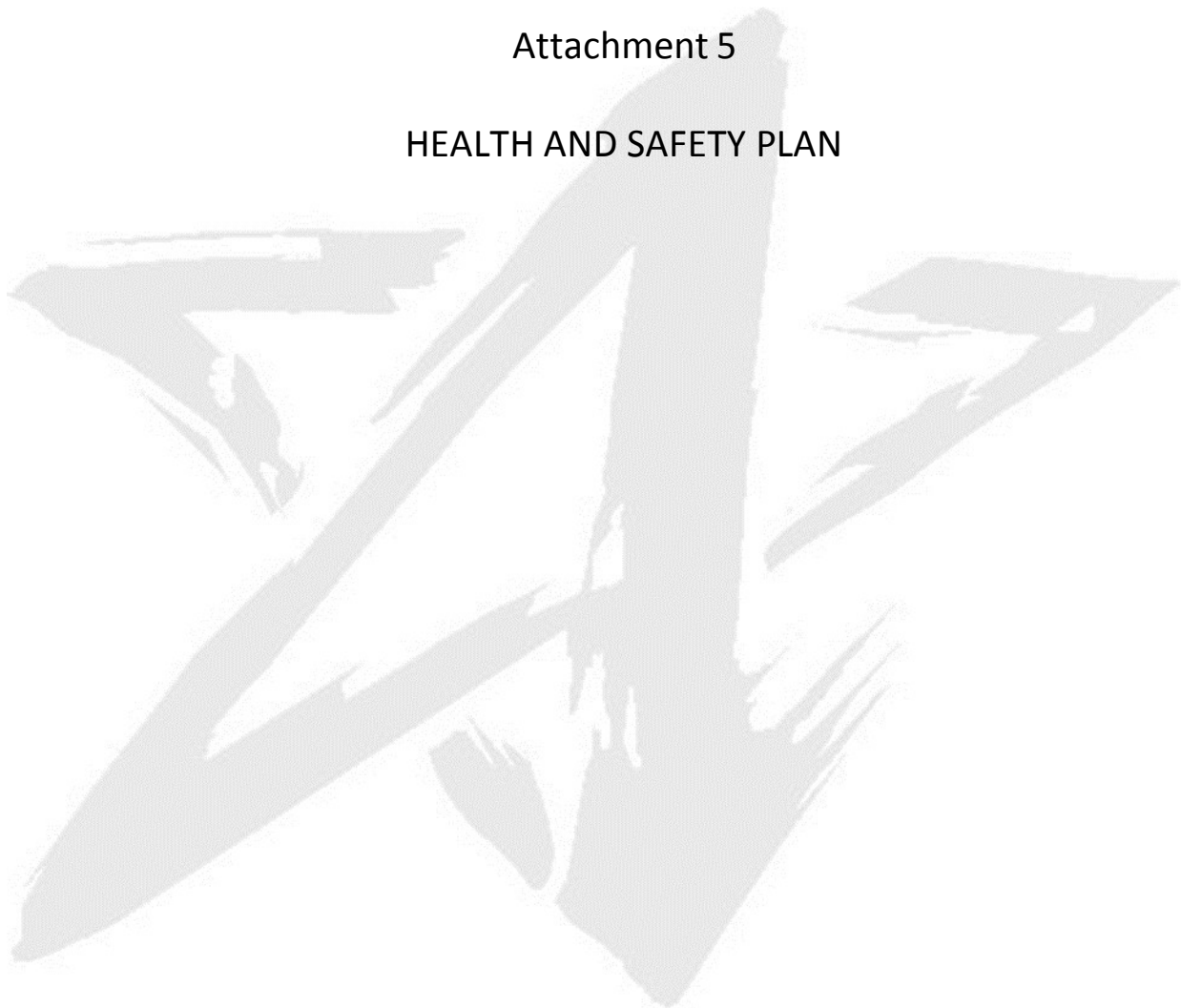
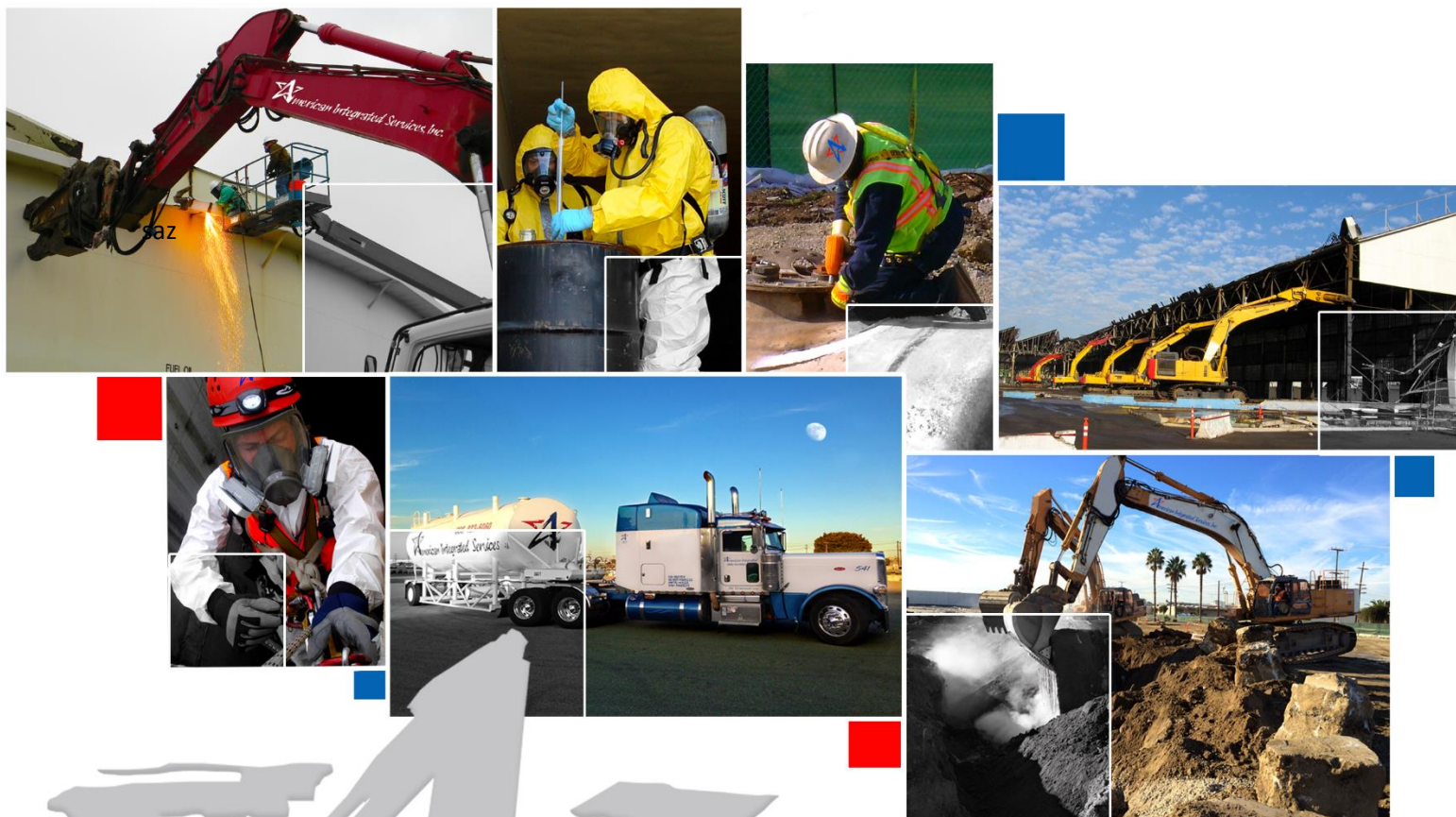


## Attachment 5

### HEALTH AND SAFETY PLAN





# AMERICAN INTEGRATED SERVICES, INC. **HEALTH & SAFETY PLAN**

Prepared for:  
Exide Technologies

Exide Technologies  
Phase I – Decontamination and Deconstruction  
2700 South Indiana Street  
Vernon, CA 90058

October 19, 2017

Prepared by:  
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Project No:  
36123

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## APPENDICES:

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APPENDIX B – Job Hazard Analysis (JHA's)

- Decontamination of COCs
- Working At Heights
- Heavy Equipment Operation
- Lock Out – Tag Out

Concrete & Asphalt Saw Cutting  
Deconstruction  
Decontamination of Tools  
Hand and Power Tools  
Torch Cutting – Hot Work  
Heat Stress – Cold Stress  
Scaffold Assembly and Disassembly  
Confined Space  
Soil Sampling  
Decontamination – Personnel  
On-Site House Keeping  
Operating A Manlift  
Roll Off Bin Delivery and Pick Up  
Skid Steer Operations  
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#### APPENDIX C – Permit to Work Forms

Confined Space Entry Permit  
Hot Work Permit

#### APPENDIX D – Field Safety Forms

Incident Report Form  
Near Miss Report Form  
Project Safety Audit Form  
Stop Work Issuance Form  
Tailgate Safety Meeting Form  
Vehicle Accident Report Form  
Job Hazard Analysis (JHA) Form

#### APPENDIX E – Equipment Inspection Forms

Aerial Boom Lift Inspection Form  
Earth Moving Inspection Form  
Excavator Inspection Form  
Fork Lift Inspection Form  
Front End Loader Inspection Form  
Loader Inspection Form  
Pick Up Truck Inspection Form  
Scissor Lift Inspection Form

#### APPENDIX F – Injury & Illness Prevention Program

Code of Safety Conduct  
Heat Illness Prevention Program  
Stop Work Authority



## APPENDIX G – Confined Space Safety Procedures

### Section 10.0 Confined Space

## APPENDIX H – Safety Data Sheets (SDS's)

Amerex Dry Chemical Fire Extinguisher  
Automatic Transmission Fluid  
BioSolve Pinkwater 2016R  
BlueDEF Diesel Exhaust Fluid  
Brake Fluid  
Clorox Germicidal Bleach  
Compressed Acetylene  
Compressed Oxygen  
Denatured Alcohol  
Diesel Engine Oil  
Diesel Fuel  
E404 Battery Cleaner and Acid Detector  
Exide Z-99 Batteries  
Fluorescent Lamps  
Hydraulic Oil  
LBC-5800 Clear-5801 White  
Lead, Metal  
Mercury Vapor Lamps  
Mercury  
Mobil 1 ESP 5W30  
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PCB's  
Peel Away 1  
Peel Away 7  
Peel Away ST-1  
Penetone 19  
Power Cleaner 155  
Power Steering Fluid  
Propane  
PVC Cement  
Rust-Oleum Marking Paint  
Shell Retinax Grease LX2  
Simple Green All Purpose Cleaner  
Smart Strip Peel Away  
Smart Strip Pro  
Specialty Vermiculite

Starting Fluid  
Two Cycle Oil  
Unleaded Gasoline  
WD-40 Aerosol



## HASP REVIEW / APPROVALS

By signature, the personnel identified below hereby acknowledge that they have reviewed and approved this Decontamination and Deconstruction Health and Safety Plan (HASP) and agree to comply with the requirements contained therein as well as the applicable State and Federal statutes and regulations.

Name and Title	Date	Signature
Alfonso Gamino AIS Health and Safety Director		
Josh Whittaker AIS Project Manager		
Mike Murray AIS Site Supervisor		
Alex Chinchilla AIS Site Safety Officer		
Dr. Maureen Sassoon, CIH #5203 AIS Document Reviewer & Concurrence		
John Hogarth Exide		
Gwen Tellegen Exide		
Rick Bethel Exide (Quantum)		

## Applicability

American Integrated Services, Inc. (AIS) has prepared this Health and Safety Plan (HASP) to perform Phase 1 Facility Decontamination and Deconstruction Activities at the former Exide Technologies recycling facility located at 2700 South Indiana Street, Vernon, CA. The estimated duration of on site activities during Phase 1 is 36 months (see schedule in the CIP). The HASP has been developed after review and consideration of all the Draft EIR comments and Final EIR responses in accordance with Section 18.0 of the Final Closure Plan and Mitigation Measure/ Project Condition of Approval No. 2 and to serve as a functional stand-alone document to be used by State and Federal agencies, onsite personnel and community members to verify that health and safety concerns associated with the above

project are properly addressed. This HASP provides onsite management teams with detailed health and safety information to allow for efficient implementation of all health and safety functions at the project site. The HASP also provides onsite personnel and subcontractors with appropriate health and safety guidance as well as be the basis for employee training for hazards specific to individual work tasks. Personnel and subcontractors shall not deviate from the guidelines, policies and procedures outlined in the HASP. A reference copy of the HASP shall be maintained at the project site at all times.

All AIS employees and subcontractors are expected to perform their assigned tasks safely with a high degree of alertness to the hazards of the workplace. Each employee and subcontractor is expected to participate in the elimination and control of potential hazards and to encourage the safe behavior of others. Each employee and subcontractor is expected to work safely in accordance with the HASP, Exide Technologies environmental health and safety rules and the OSHA Health and Safety Standards and Regulations contained in Title 29, Code of Federal Regulations, Part 1910 and 1926 and Cal/OSHA regulations 8CCR Subchapter 4, Construction Safety Orders and 8 CCR Sub-Chapter 7, General Industry Safety Orders. It is the management team's role to establish these safety commitments as its highest priority and to communicate safety expectations in a visible and inspiring manner.

This plan serves to outline the level of personal protection and safe operating guidelines. Personnel and subcontractors must review and agree to comply with the most updated HASP. This plan shall be acknowledged by all personnel and subcontractors in writing on the Health and Safety Acknowledgement form, located in Appendix A. Modifications or changes to requirements may be necessary as the work progresses. Deviation from this plan requires approval by AIS Health and Safety Director, EXIDE representative and DTSC. The Project Manager must record all changes in the HASP field log form located in page 10, in case of a conflict between this plan and federal, state or local regulations, the more stringent shall apply.

To maintain a safe and healthful work environment, the HASP will be reviewed at least annually by the AIS Health and Safety Director and the EXIDE representative and updated if changes in the environmental conditions or project operations warrant modifications. The HASP will be updated to reflect changes in the law, including 29 CFR parts 1910 and 1926, or applicable provisions of the California Code of Regulations. The HASP will comply with most updated Cal/OSHA standards. The revised HASP from the annual review, if revision is necessary, will be provided to DTSC for review and approval.

The HASP generated by AIS in connection with the Project is for use on a specific site and in connection with a specific project. AIS makes no representation or warranty as to the suitability of the HASP for reuse on another site or as to the suitability of the HASP for reuse on another project or for modifications made by the Client or a Third Party to the HASP.

*No third party has the right to rely on the HASP. Each Third Party should abide by its own site-specific health and safety plan in accordance with its own professional judgment and established practices.*

### HASP Field Log Form

Revision	Changes Made	Made by:	Date	Accepted by:

## 1.0 HASP-AT-A-GLANCE

This Summary sheet is provided as a quick reference/overview only. The remainder of this Health and Safety Plan (HASP) is integral to the safe conduct of site operations and must be applied in its entirety.

AIS has the responsibility for health and safety of its employees and their subcontractors during the decontamination and deconstruction work at the Exide facility under the HASP. The Project Administrator with the authority and responsibility for controlling AIS's subcontractors regarding safety and health issues are the Project Manager and SSO. AIS and their subcontractors' management are responsible for assigning specific tasks to their employees and for ensuring that their employees are properly trained and are in compliance with applicable State and Federal regulations. Each subcontractor is responsible for administering their own safety and health program, which incorporates this HASP as a minimum standard. Subcontractors are responsible for conducting their work operations in a manner to protect the safety and health of their employees, as well as others who may be impacted by subcontractor's work activities. *Pursuant to California Code of Regulations, title 8, article 4.5, "Multi-Employer Worksites"*, subcontractors and AIS employees have authority to stop work for health and safety concerns at any point during project activities. AIS and their subcontractors will create a job specific Job Hazard Analysis (JHA) for each scheduled activity. During morning Tailgate meetings AIS will communicate to Exide personnel and subcontractors any foreseeable hazardous activities for the day, documenting this in the daily health and safety meeting notes. Exide will have responsibility for its employees, contractors and subcontractors (other than AIS and its subcontractors) conducting activities at the site while the Decontamination and Deconstruction activities are carried out.

### 1.1 Stop Work Authority

Every AIS employee and subcontractor at the EXIDE work site, is empowered, expected and has the responsibility to stop the work of another co-worker, if the working conditions or behaviors are considered unsafe. If you are discouraged from exercising the "Stop Work Authority" or if there are penalties for doing so, then you should report this to the AIS Health and Safety Department at 310-522-1168. Work may resume when the Project Manager or SSO ensures that the issue stopping work has been mitigated.

## 1.2 Emergency Contacts

**FOR ALL MEDICAL EMERGENCIES, CALL 911 OR THE LOCAL EMERGENCY NUMBER.**

For ALL non-emergency incidents resulting in any injury or illness, you must:

- Give appropriate first aid care to the injured or ill individual and secure the scene.
- Immediately notify the PM, SSO, and the EXIDE representative.
- Clients may have their own procedures which we may need to follow.

For all incidents (injuries, illnesses, spills, fires, property damage, etc.) and significant near misses, fill out the AIS incident report within 24 hours.

**IMPORTANT NOTE:** When calling local first responders (911) from a cell phone, you will automatically be connected with the California Highway Patrol dispatch. You must then inform the dispatcher of the local agency you wish to speak with. Instead of calling 911 from a cell phone, call the Vernon Police Emergency Line, 323-587-5171. If calling from a land line, 911 is the preferred emergency number to call.

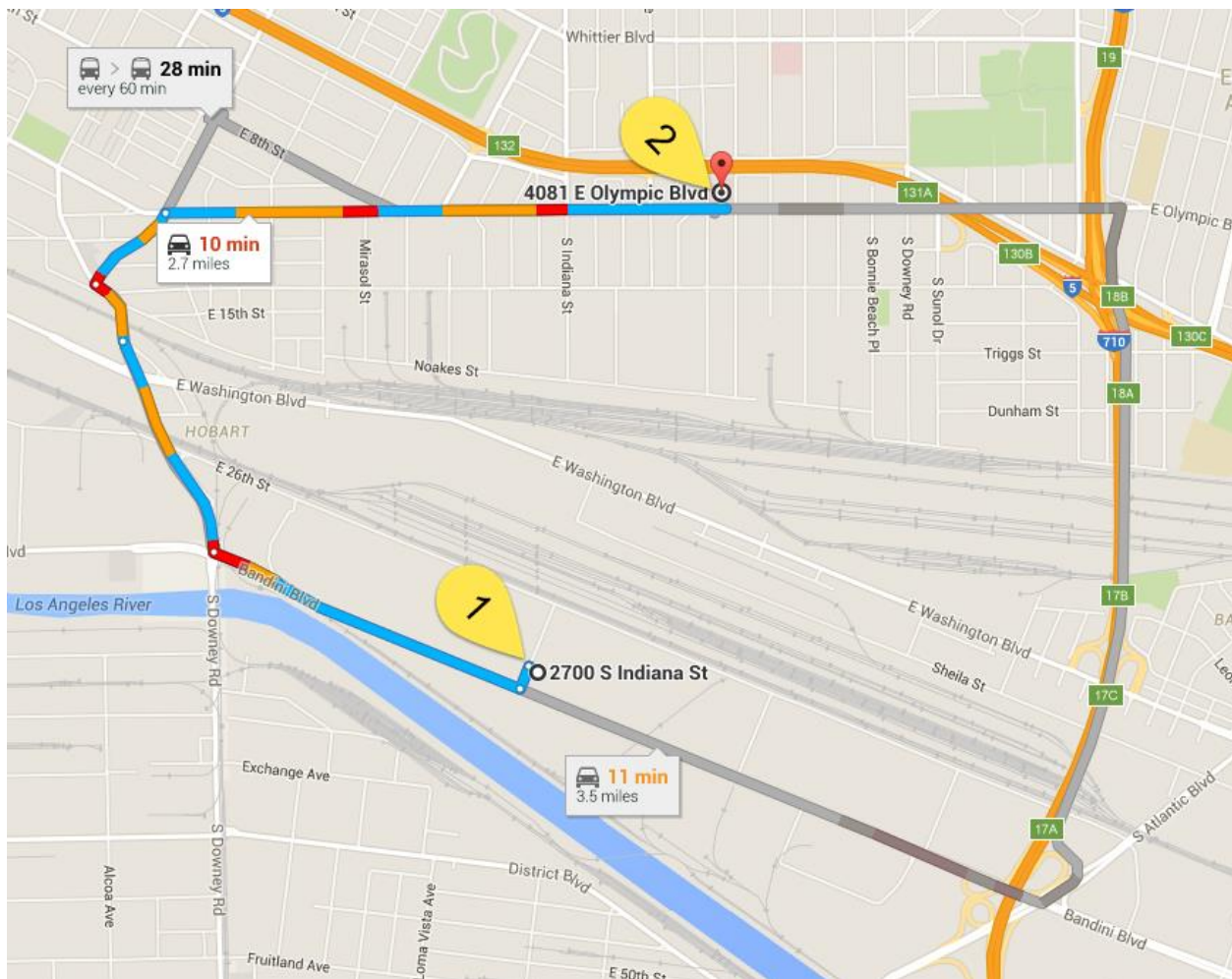
### Emergency Phone Numbers

Title	Name	Office Phone	Cell Phone
Police/Fire/Ambulance		911	
Vernon Police	(when using a cell phone to initiate the call)	323-587-5171	
Hospital	Los Angeles Community Hospital – Including Emergency Medical Care 4081 E. Olympic Blvd, Los Angeles, CA 90023	323-267-0477	
Occupational Health Clinic	US Health Works Medical Group 3851 Soto Street Vernon, CA 90058	323-585-7162	
Poison Control Center		800-879-4766	
National Response Center		800-424-8802	
CHEMTREC		800-424-9300	
AIS Project Manager	Josh Whittaker	310-522-1168	310-591-4189
AIS H&S Director	Alfonso Gamino	310-522-1168	310-628-3450
AIS Site Supervisor	Mike Murray	310-522-1168	562-756-5863
AIS Site Safety Officer	Alex Chinchilla	310-522-1168	310-466-3104
EXIDE	John Hogarth	310-262-1101	323-395-6130
EXIDE (Quantum)	Rick Bethel	310-262-1101	513-314-7543

### 1.3 Hospital/Occupational Clinic Map and Directions

#### Hospital

Los Angeles Community Hospital - Including Emergency Medical Care  
4081 E. Olympic Blvd,  
Los Angeles, CA 90023  
323-267-0477



**10 min** (2.7 miles)



via Bandini Blvd and E Olympic Blvd

7 min without traffic

---

## 2700 S Indiana St

Vernon, CA 90058

↑ Head south on S Indiana St toward Bandini Blvd

266 ft

↘ Turn right onto Bandini Blvd

0.7 mi

↘ Turn right onto S Downey Rd

0.5 mi

↑ Continue onto S Grande Vista Ave

0.1 mi

↘ Turn right onto S Lorena St

0.2 mi

↘ Turn right onto E Olympic Blvd

1.2 mi

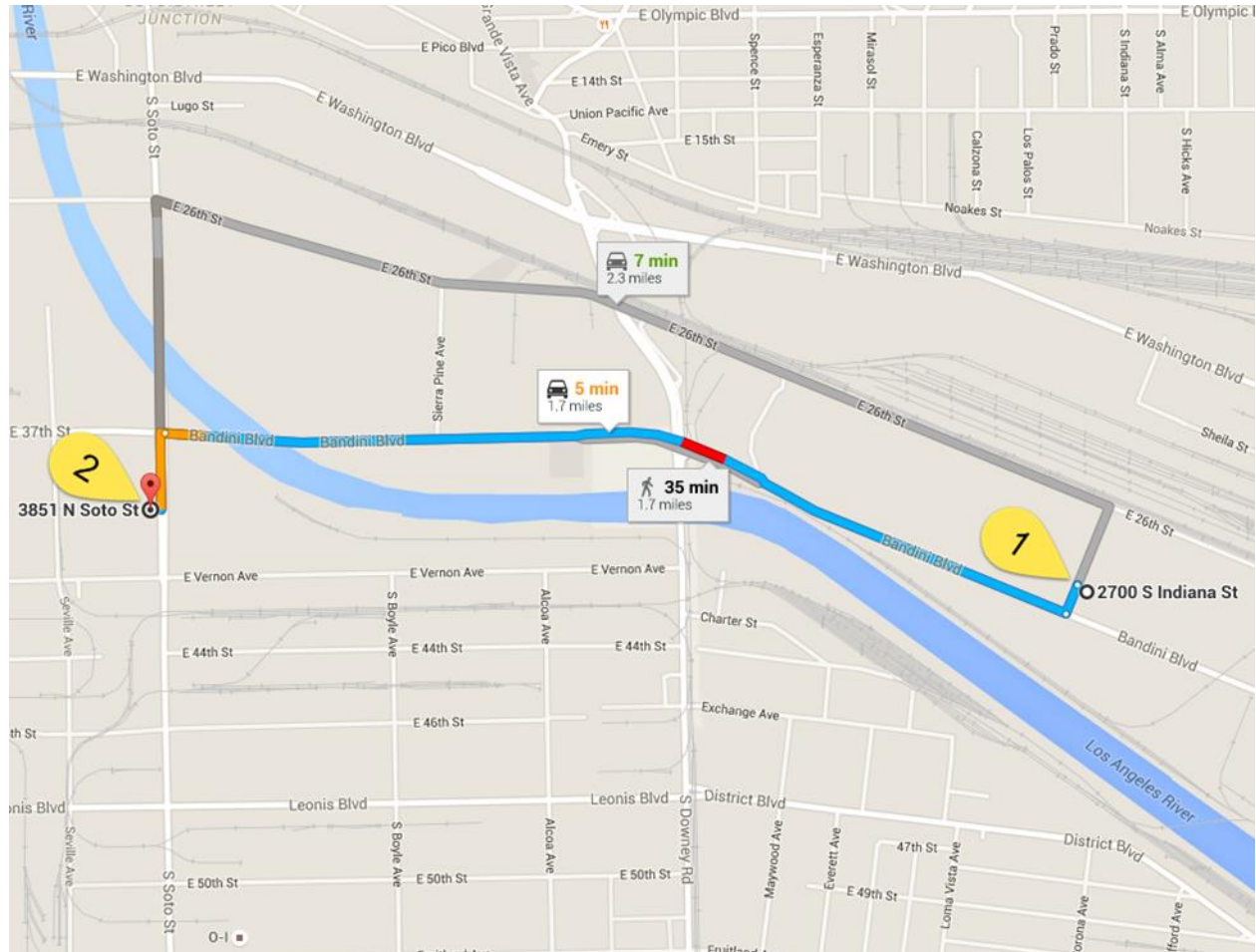
## 4081 E Olympic Blvd

Los Angeles, CA 90023



**Occupational Clinic**

US Health Works Medical Group  
3851 Soto Street  
Vernon, CA 90058  
323-585-7162



**5 min** (1.7 miles)



via Bandini Blvd

4 min without traffic

---

## 2700 S Indiana St

Vernon, CA 90058



Head south on S Indiana St toward Bandini Blvd

266 ft



Turn right onto Bandini Blvd

1.5 mi



Turn left onto S Soto St



Destination will be on the right

0.1 mi

## 3851 N Soto St

Vernon, CA 90058

## 1.4 Proposed Work Activities

AIS developed this HASP for use on the former EXIDE Technologies recycling facility. AIS's role is to provide asset recovery, decommissioning/decontamination and deconstruction services at the site. The general objectives of this project are to:

- Mobilization / demobilization.
- Decontaminate personnel, structures and equipment.
- Recover assets.
- Abate asbestos.
- Deconstruction of site structures.
- Disposition of removal units and components
- Waste transportation and disposal

## 1.5 Constituents of Concern

Lead, asbestos and arsenic have been identified as potential on-site contaminants which may be encountered during work activities. Exposure to many of these substances is regulated by the Occupational Safety and Health Administration (OSHA) at both the State and Federal levels. Where available, Cal-OSHA PELs are presented in the following tables.-In addition, the National Institute for Occupational Safety and Health (NIOSH) and the American Conference of Governmental Industrial Hygienists (ACGIH) publishes recommended exposure levels (RELs and TLVs, respectively) and ceiling exposure limits. The OSHA PELs, RELs, TLVs, ceiling exposure limits and Immediately Dangerous to Life and Health (IDLH) concentrations (when available) for these substances in air are presented in the following tables.

<b>Material name: Lead</b>		<b>Highest reported concentration:</b> 106,000 mg/kg lead max / Potential for pure lead.	
<b>Primary hazards:</b> Possible carcinogen and toxic to human reproduction. Ingestion from contact with lead-contaminated materials or inhalation of toxic lead particles during cutting, grinding, crushing and other mechanical alterations of lead containing items. High exposures to lead may also occur during welding or thermal cutting activities.		<b>Exposure symptoms:</b> Abdominal pain, nausea, or vomiting.  <b>Primary Health Effects:</b> Damage to the CNS and brain, kidney damage, urinary system damage, blood forming system damage, elevated blood pressure.	
<b>Cal/OSHA Exposure Limits</b>	<b>NIOSH Exposure Limits</b>	<b>ACGIH Exposure Limits</b>	<b>IDLH Level</b> 100 mg/m <sup>3</sup>
<b>PEL:</b> 0.05 mg/m <sup>3</sup> <b>AL:</b> 0.03 mg/m <sup>3</sup>	<b>REL:</b> 0.05 mg/m <sup>3</sup>	<b>TLV:</b> 0.05 mg/m <sup>3</sup>	
<b>STEL:</b> NA	<b>STEL:</b> NA	<b>STEL:</b> NA	
<b>Other:</b>	<b>Other:</b>	<b>Other:</b>	

<b>Material name: Asbestos</b>		<b>Highest reported concentration: NA</b>		
<b>Primary hazards: Carcinogen.</b> Inhalation and/or ingestion from contact with asbestos-contaminated materials.		<b>Exposure symptoms:</b> Asbestosis (chronic exposure): dyspnea, interstitial fibrosis, restricted pulmonary function, finger clubbing, and eye irritation.		
<b>Cal/OSHA Exposure Limits</b>	<b>NIOSH Exposure Limits</b>	<b>ACGIH Exposure Limits</b>	<b>IDLH Level</b> NA	
<b>PEL:</b> 0.1 f/cc Based on a 480 minute exposure term.	<b>REL:</b> 0.1 f/cc Based on a short term 100 minute exposure.	<b>TLV:</b> 0.1 f/cc Based on a 480 minute exposure term.		
<b>STEL:</b> <u>Excursion Limit: 1f/cc over 30 minutes</u>	<b>STEL:</b> NA	<b>STEL:</b> NA	<b>Ionization Potential:</b> NA	
Other: Class 1 >1f/cc SAR unit is required per 8CCR1529(h)(3)(E)	Other:	Other		

<b>Material name: Arsenic</b>		<b>Highest reported concentration: 3,860 mg/kg could be 10%</b>		
<b>Primary hazards: Carcinogen.</b> Carcinogen. Dermal absorption and/or ingestion from contact with arsenic-contaminated materials. Exposure could cause unconsciousness or death.		<b>Exposure symptoms:</b> Cough, sore throat, shortness of breath, abdominal pain, diarrhea, nausea, vomiting, burning sensation in the throat and chest, shock, collapse, or unconsciousness.		
<b>Cal/OSHA Exposure Limits</b>	<b>NIOSH Exposure Limits</b>	<b>ACGIH Exposure Limits</b>	<b>IDLH Level</b> 5 mg/m <sup>3</sup>	
<b>PEL:</b> 0.01 mg/m <sup>3</sup> <b>AL:</b> 0.005 mg/m <sup>3</sup>	<b>REL:</b> 0.002 mg/m <sup>3</sup> (for 15 minute exposure)	<b>TLV:</b> 0.01 mg/m <sup>3</sup>		
<b>STEL:</b> 0.002 mg/m <sup>3</sup> for 15 minutes	<b>STEL:</b> 15 minute STEL of 0.002 mg/m <sup>3</sup> (REL & STEL are identical)	<b>STEL:</b> NA		
Other: Max allowable concentration (ceiling limit) of 0.03 mg/m <sup>3</sup>	Other:	Other		

Cal/OSHA Permissible Exposure Limits (PEL), Action Levels (AL) and Short Term Exposure Limits (STEL); 8CCR 5155 Table AC-1  
NIOSH Recommended Exposure Limits (REL), STELs, and Immediately Dangerous to Life and Health (IDLH); <http://www.cdc.gov/niosh/npg/>  
ACGIH Threshold Limit Values (TLV) and STELs.  
See Title 8 General Industry Safety Orders Section 5214 for additional detailed requirements regarding arsenic including: registration of use and reporting incidents, exposure monitoring, regulated areas, engineering and work practice controls, written program, respiratory protection, PPE, housekeeping, hygiene facilities and practices, communication of hazards, employee training, medical surveillance, record keeping and observation of monitoring.

## 1.6 Hazard Analysis

The following potential hazards may affect the proposed field activities. Field personnel are required to develop the necessary Job Hazard Analysis (JHA) for all tasks corresponding to this project. JHAs will be developed for each of the scope of work activities and submitted prior to the start of field work. Physical hazards associated with site activities include, but are not limited to, the following:

Lead and asbestos exposure	Work at height
Pinch points/sharp objects	Slip, trip and falls
Heavy equipment line of fire	Heat stress/cold stress
Mechanical and hand demolition	Biological hazards (e.g. spiders, rodents, Etc.)
Hot work	Sound/Noise
Lock-out / tag-out	Electrical hazards
Use of personal protective equipment	Pressure washing
Confined space entry	Overhead hazards

## 1.7 Personal Protective Equipment (PPE)

Level D :	Level C :
Hard Hat NIOSH approved	Level D plus the Following as Warranted:
Steel-toed work boots	
Safety glasses NIOSH approved	Full or Half face respirator (P100/OV combination)
Cut-resistant gloves	Tyvek coveralls (for dust)
Long sleeve shirt/pants	Nitrile gloves inner/outer
High visibility traffic vest	Chemical resistant boots with steel toe
Hearing protection (as necessary)	
Face Shield (as needed)	

## 1.8 Decontamination

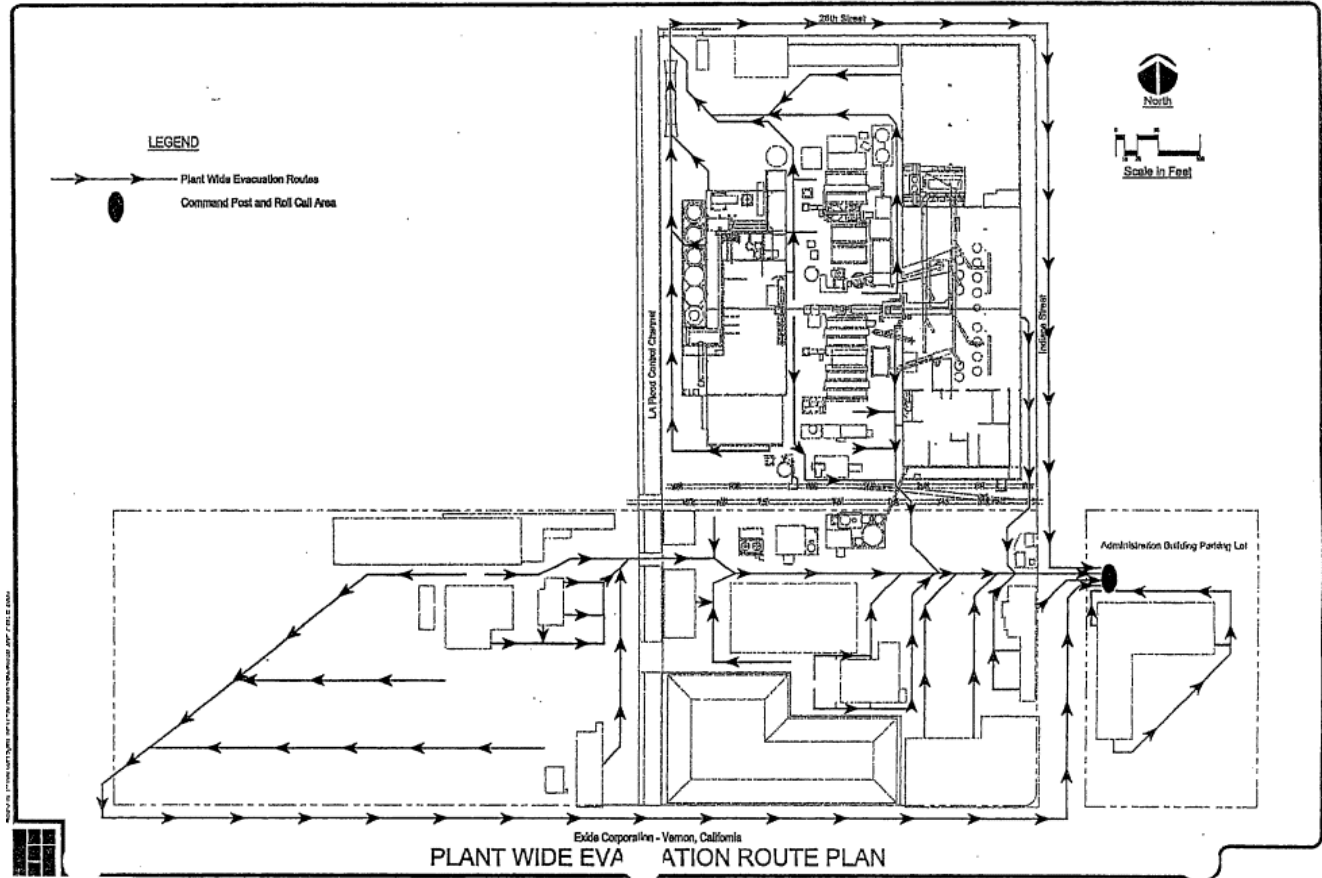
All disposable PPE used shall be properly containerized and disposed of in provided containers. If tools or equipment cannot be decontaminated, they shall be properly secured for off-site disposal and sent to a pre-approved disposal site.

## 1.9 Air Monitoring

AIS will perform air monitoring inside the exclusion zone to assure the proper selection of engineering controls, work practices, and PPE.

## 1.10 Evacuation Procedures

Evacuation alarms and routes will be determined cooperatively between AIS and EXIDE project personnel if they deviate from Exide's standard evacuation routes. Evacuation plans will be updated as needed to reflect changes in plant access and traffic patterns due to work activities. Changes in evacuation routes or alarms will be communicated to all parties on site via daily tailgate safety meetings.





## 2.0 SITE ORGANIZATION STRUCTURE

This section specifies American Integrated Services, Inc. (AIS) Project Organization. Project personnel will be instructed as to their site specific responsibilities in a project meeting before field activities are initiated.

### 2.1 Project Manager

The Project Manager is responsible for ensuring that this HASP is prepared, reviewed and authorized. The Project Manager will not initiate field activities until this HASP has been approved, and assigned personnel have received the required level of specific health and safety instruction. The Project Manager will consult with the H&S Director and Site Safety Officer (SSO) if revision of this HASP is required. The Project Manager is responsible for the overall health and safety performance and compliance with applicable regulations and is the senior level contact in the event of a site emergency.

Additionally, the Project Manager will ensure that health and safety activities are conducted according to HASP requirements and to company policies and procedures. The Project Manager will refrain from initiating field activities until the site specific HASP is complete.

### 2.2 Site Supervisor

The Site Supervisor will implement field activities at the Project Site. The Site Supervisor authority and responsibilities include, but are not limited to, the following:

- Briefing project personnel before work begins each day regarding the contents of this HASP and authorized revisions of this HASP, including potential hazards, safe work practices, required personal protective equipment (PPE), and emergency procedures.
- Maintaining a copy of this HASP at the site.
- Ensuring that specified PPE is available and, when appropriate, worn by personnel working at the site.
- Controlling access to the exclusion zone and/or work areas as defined.
- Establishing emergency evacuation routes and designated meeting places in advance of each work activity and communicating this information during the daily safety briefing.
- Coordinating response to emergencies at the site, directing evacuation, or summoning emergency assistance, if necessary.
- Conducting site walk-through inspections on a regular basis.
- Maintaining field documentation, including daily tailgate safety briefing attendance sheets, air monitoring data, and site walk-through inspection results.
- Notifying the Project Manager immediately regarding any health and safety problems or emergencies.
- Assigning an alternate SSO if the designated SSO will be absent.
- Halting activities when unsafe conditions or work practices exist at the site.
- Notifying the H&S Director of changes in site conditions or in the scope of field activities.

### 2.3 H&S Director

The Health and Safety Director (HSD) will review, and authorize this HASP and any subsequent revisions to the plan. The HS Director will assist with the implementation of the HASP and provide project support on health and safety issues. The HS Director will consult with the Project Manager if revision of this HASP is required. The HS Director will verify field personnel training, required medical surveillance, and respirator fit test requirements. The HS Director will advise the Project Manager regarding industrial hygiene concerns, interpretation, and evaluation of analytical exposure data, and other safety related issues, as needed.

### 2.4 Site Safety Officer

The SSO will implement this HASP in the field. The SSO authority and responsibilities include, but are not limited to, the following:

- Informing site personnel before work begins each day of the contents of this HASP and authorized revisions of this HASP, including potential work area hazards, safe work practices, required personal protective equipment (PPE), and emergency procedures.
- Maintaining a copy of this HASP at the site.
- Ensuring that specified PPE is available and, when appropriate, worn by personnel working at the site.
- Controlling access to the exclusion zone and/or work areas as defined.
- Establishing emergency evacuation routes and designated meeting places in advance of each work activity and communicating this information during the daily safety briefing.
- Coordinating response to emergencies at the site, directing evacuation, or summoning emergency assistance, if necessary.
- Conducting site walk-through inspections at least on a daily basis.
- Inspecting heavy equipment when brought on site and prior to first use each day used, including the testing of all emergency stop buttons.
- Maintaining field documentation, including daily tailgate safety briefing attendance sheets, air monitoring data, safe work practices, and site walk-through inspection results.
- Notifying the Project Manager immediately regarding any health and safety problems or emergencies.
- Assigning an alternate SSO if the designated SSO will be absent.
- Halting project activities when unsafe work conditions or practices exist at the site.
- Notifying the Health and Safety Director of changes in site conditions or in the scope of field activities.

## 2.5 Assigned AIS Employees

Assigned personnel will be responsible for knowledge of the HASP for work in which they are engaged and for compliance with the provisions of the plan. The responsibilities of the assigned employees include, but are not limited to, the following:

- Participating in daily tailgate safety meetings and site-specific training activities.
- Implementing safe work practices and good personal hygiene for hazardous work areas and waste operations.
- Maintaining PPE in good working condition.
- Responding to site emergencies, if necessary, directing evacuation or summoning emergency assistance.
- Notifying the SSO of any unsafe work conditions, incidents, injuries and/or near misses
- Attending any job required health and safety training (i.e., annual refreshers for HAZWOPER, Asbestos and/or Lead Abatement)
- Attending any job required medical evaluations (i.e., annual medical exams as required by Cal-OSHA for HAZWOPER, Asbestos and/or Lead Abatement)
- Arriving to work fit for duty (fully rested and not under the influence of any drugs or alcohol).

## 2.6 Subcontractors

AIS has the responsibility for health and safety of its employees and their subcontractors during the decontamination and deconstruction work at the Exide facility under the HASP. The Project Administrator with the authority and responsibility for controlling AIS's subcontractors regarding safety and health issues are the Project Manager and SSO. AIS and their subcontractors' management are responsible for assigning specific tasks to their employees and for ensuring that their employees are properly trained and are in compliance with applicable State and Federal regulations. Each subcontractor is responsible for administering their own safety and health program, which incorporates this HASP as a minimum standard. Subcontractors are responsible for conducting their work operations in a manner to protect the safety and health of their employees, as well as others who may be impacted by subcontractor's work activities. *Pursuant to California Code of Regulations, title 8, article 4.5, "Multi-Employer Worksites"*, subcontractors and AIS employees have authority to stop work for health and safety concerns at any point during project activities. AIS and their subcontractors will create job specific JHAs for each scheduled activity. During morning Tailgate meetings AIS will communicate to Exide personnel and subcontractors any foreseeable hazardous activities for the day, documenting this in the daily health and safety meeting notes. Exide will have responsibility for its employees, contractors and subcontractors (other than AIS and its subcontractors) conducting activities at the site while the Decontamination and Deconstruction activities are carried out.

Each AIS subcontractor is required to designate a Safety Representative who is responsible for the safe and healthful performance of work by his work force. During project activities, the Safety Representative

will perform continuing work area inspections, participate in the development of Job Hazards Analysis (JHA) and will attend periodic safety meetings with the SSO.

American Integrated Services, Inc. plans to utilize the following subcontractors:

Company:	Project Manager:	Task:	Phone Number:
Huntington Pacific Corporation	Tom Huntington	Asphalt and Sealing	619-454-1999
Bigge Crane and Rigging	Tom Fackrell	Crane and Rigging	562-843-8838
CSI Electrical	Sean Dromgoole	Electrical/Rerouting/ Disconnections	562-477-4193
United Mechanical Contractors	Jeremy Yablan	Mechanical Work	805-558-4213
Safeway Scaffold	Shannon O'Connell	Scaffolding	310-995-2935
Sigma Engineering	Joe Farre	Deconstruction Engineering	702-300-5529

## 2.7 Initial Review of the HASP

An initial review of the site-specific HASP will be held either prior to mobilization or after mobilization but prior to commencing work at the site to communicate HASP details and answer questions to the assigned employees. The following topics will be addressed during the briefing:

- Name of SSO and any designated alternate.
- Hazardous chemicals that may be encountered during on-site activities.
- Physical hazards that may be encountered on site.
- Special training requirements and Safe Work Practices.
- Work tasks.
- Emergency communication signals, codes, and location of emergency contact information.
- Emergency procedures for safety events, fires, and hazardous material incidents.
- Emergency evacuation routes.

## 2.8 Daily Safety Meetings

Daily safety meetings for AIS employees and subcontractors will be conducted each morning prior to starting work and if needed following lunch each day prior to resuming work. The daily tailgate safety meetings will include a discussion of the following health & safety-related topics, among others:

- Who is doing what, where and how.
- The potential for overlapping site operations.
- Changes in evacuation routes and/or traffic patterns.
- Changes to the JHAs.
- Discussion of recent Incidents or safety observations.
- Feedback from the project personnel.

Representatives from other parties (i.e. DTSC, Exide) working on site will be encouraged to attend the daily safety meetings to enhance communications between parties performing simultaneous operations at the site.

## 2.9 Incident Reporting

Once first aid and/or emergency response needs have been met, the following parties are to be contacted:

Title :	Name :	Phone :
AIS Project Manager	Josh Whittaker	310-591-4189
Project Engineer	Dan Wallace	916-761-0069
Exide	John Hogarth	323-262-1101 / 323-395-6130
Exide (Quantum)	Rick Bethel	513-314-7543

For emergencies involving personal injury and/or exposure including near misses, the SSO or designee will complete and submit an Incident Report form within 24 hours. If the employee involved is not an AIS employee, his employer shall receive a copy of the report.

## 3.0 HAZARD IDENTIFICATION AND CONTROL

### 3.1 Job Hazard Analysis

An effective health and safety program relies on the ability of personnel to recognize, evaluate, and control potential H&S hazards associated with the overall project, major activities, and individual tasks. For this reason, AIS requires that each project have a Job Hazard Analysis (JHA) completed for tasks that could pose a threat to the environment, result in personal injury or damage to equipment. The JHA is meant to be a supplement to the site-specific HASP.

A Job Hazard Analysis will be prepared by the SSO and all crew supervisors, before beginning each project activity posing H&S hazards to site personnel using the JHA form provided in Appendix B. The JHA shall identify the work tasks required to perform each activity, along with potential H&S hazards and recommended control measures for each work task. In addition, a listing of the PPE required to perform the activity, training requirements and necessary permits needed must be identified.

AIS subcontractors are required to provide JHAs specific to their scope of work on the project for acceptance by the SSO. Additions or changes in AIS or subcontractor field activities, equipment, tools or material to perform work or additional/different hazard encountered that require additional/different hazard control measures requires either a new JHA to be prepared or an existing JHA to be revised.

### 3.2 Behavior Based Safety

The AIS behavior-based safety system is to be used by all AIS employees. Behavior Based Safety (BBS) is a process that creates a safety partnership between management and employees, which continually focuses people's attentions and actions on theirs and on other's daily safety behavior. BBS focuses on what people do, analyzes why they do it, and then applies a research-supported intervention strategy to improve what people do. AIS has been successful with their BBS program by including all employees, from the company's owner to the front-line workers including hourly, salary, union employees, contractors and sub-contractors. To achieve changes in behavior, a change in policy, procedures and/or systems most assuredly will also need some change. Those changes cannot be done without buy-in and support from all involved in making those decisions. All AIS coordinated site workers (including subcontractors) must participate in this behavior-based safety program for all site activities. The subcontractor may use their own behavior-based safety program upon review and approval of the AIS

Project Manager (PM) and SSO, or the subcontractors will be required to follow the AIS behavior-based safety program.

Everyone on site as part of this project will make a commitment to work safely and to look out for others on the job site. Daily tailgate safety meetings will take place to remind all AIS employee and subcontractors of the hazards associated with the work at hand, as described in applicable JHAs.

### 3.3 Stop Work Authority

It is AIS policy that all site personnel have the authority, without fear of reprimand or retaliation to:

- **Immediately** stop any work activity that presents a danger to the site team or the public; and
- Get involved, question and rectify any situation or work activity that is identified as not being in compliance with the HASP or with broader AIS health & safety policies.

All site personnel are empowered to identify and correct Unsafe Acts, Unsafe Conditions and Near Misses before they can cause an Incident. It is the responsibility of the AIS PM and SSO to continue to remind all site workers that each person has stop work authority. It is a goal for the site to have a safety culture of:

***“IF IT IS NOT SAFE, DON’T DO IT!!!”***

If someone sees an unsafe situation or act, even if that person is not directly involved in the unsafe work, it is the responsibility of the person making the observation to stop work and notify site workers of the unsafe situation. If someone utilizes their Stop Work Authority, then work can only be restarted by the AIS SSO, in concert with the AIS PM.

### 3.4 Disciplinary Action Policy

The AIS Disciplinary Action Policy is explained in detail, in the Corporate H&S Plan/ Injury and Illness Prevention Program (IIPP).

Health and safety violations are categorized into three classes, which are defined below.

- **Non-Serious:** Any activity or practice which is not likely to cause serious physical injury, illness, or death, or not likely to cause serious property damage to equipment, real property, or to the environment.
- **Serious/Stop Work/Imminent Danger:** Any activity or practice that has the potential to cause serious physical harm, death, or permanent injury or impairment to themselves or another and/or serious environmental or property damage. These conditions require an immediate Stop Work situation, and all potentially affected employees and others (i.e., visitors, subcontractors, public) will be removed from the area. Only workers properly

trained and equipped with the appropriate PPE will be allowed in the area to mitigate or correct the adverse situation.

- **Repeat:** Violations for which an employee has been previously provided verbal or written notification for the same or another serious violation.

Consequences for such health and safety violations are:

***Non-Serious Violations***

- The First offense results in a verbal warning. For Project staff, the violation is logged in the project field book by either the PM or SSO and then sent to Human Resources. For Office staff, the violation is documented by the Injury/Illness Prevention Program Administrator and then sent to Human Resources.
- The Second offense results in a written warning and a “Violation Notice” that is used to document the offense and provide written notice to the offending employee.
- The Third offense is subject to time off without pay or termination at the discretion of the Corporate Director of Safety and Health and Human Resources.

***Serious Violations and Repeat Violations***

- The First offense is subject to time off without pay pending an investigation, or termination at the discretion of the Corporate Director of Safety and Health and Human Resources Director based upon the seriousness of the violation.
- The Second offense is subject to immediate dismissal from work, without pay, and possible termination based upon the seriousness of the violation, pending Corporate Director of Safety and Health and Human Resources Director approval.



## 4.0 EMPLOYEE TRAINING AND MEDICAL SURVEILLANCE REQUIREMENTS

All AIS and AIS subcontractor personnel working on-site (including their on-site supervisors) who may be exposed to hazardous substances, health hazards, or safety hazards will not be permitted to participate in or supervise field activities until they have been trained to a level required by their job function and responsibility, and medically qualified to perform the work.

### 4.1 Visitors and Site Workers Who Will Not Enter Work Zones

Visitors to the site and site workers, such as security guards and maintenance personnel, who will not enter work zones will report to the SSO. They will be required to sign in and out to ensure the site management are aware how many people are on site in the event of an emergency. Visitors will be required to undergo site induction, wear safety equipment (i.e. hard hat, safety glasses, hi-visibility vest etc.) and will be accompanied by a representative on site at all times. Visitors and site workers are subject to all other requirements contained in this HASP.

### 4.2 Site Workers Who Will Enter Work Zones

Employees performing intrusive field work associated with the decommissioning/decontamination and deconstruction activities are required to have the following training and medical surveillance. Management and supervisors directly responsible for, or who supervise employees engaged in, hazardous waste operations will have completed the required 8-hour manager/supervisor HAZWOPER course as required by 8 CCR 5192( e)(4)

- Training meeting the requirements of Title 8 CCR 5192(e), Hazardous Waste Operations and Emergency Response (HAZWOPER).
- 40-hour HAZWOPER training (plus 3 days onsite and supervised field training for site workers and 3 days onsite and supervised field training for supervisors with an additional 8 hours of the manager/supervisor HAZWOPER course, along with current 8-hour refresher; they shall have their current certifications available for review on site. If arsenic was not discussed during the HAZWOPER classes, then awareness training shall be conducted/or arranged for by the SSO prior to commencement of arsenic related work. For those involved in Lead Abatement activities, they shall receive training pursuant to Cal/OSHA 1532.1 and the California Department of Public Health (CDPH) requirements and have their CDPH picture identification available.
- Medical clearance to wear respirator and a valid respirator fit test as required by Title 8 CCR 5144(k).
- Fit to work medical clearance.
- Participate in a medical surveillance program as required by Title 8 CCR 5192(f)
- Participate in biological monitoring as may be required by Lead Standards Title 8 CCR 1532.1(j) and including a minimum of pre and post project blood sampling and analysis for lead and Zinc Protoporphyrin (ZPP) levels to each employee covered under subsection (j)(1)(A) on the following schedule:
  - At least 6 months to each employee covered under subsection (j)(1)(A);

- At least every two months for each employee whose last blood sampling and analysis indicated a blood lead level at or above 40 µg/100g of whole blood. This frequency shall continue until two consecutive blood samples and analysis indicate a blood lead level below 40 µg/100 g of whole blood; and
- At least monthly during the removal period of each employee removed from exposure to lead due to an elevated blood lead level.
- ZPP determinations shall be made available as soon as possible but no later than the first biological monitoring scheduled for an employee.

American Integrated Services, Inc. maintains a medical surveillance program for all employees who are exposed at or above the action level. This medical surveillance consists of a review of medical and work history, a physical exam and biological monitoring. This exam is offered annually at no charge to affected employees. For employees otherwise required to wear a respirator, a physician will determine that the employees are able to perform the work and use the equipment.

#### 4.3 Site Workers Potentially Exposed to Asbestos

Employees who will be working on site and who may be exposed to asbestos are required to have the following additional training and medical surveillance.

- 32 Hours Worker Initial Training as required by Title 8 CCR 1529(k)(9)
- Asbestos Supervisors must have 40 hours of training (initial 32 hrs + 8 hrs) for the Competent Person and be DOSH certified, as required by 8 CCR 1529(k)(9); they shall have their current certifications available for review on site.
- Participate in a medical surveillance program as required by Title 8 CCR 1529(m). Asbestos training will be provided to all employees who perform Class I through Class IV asbestos operations, regardless of exposure level as described in subsection 1529(k)(9).

#### 4.4 Site Personnel Job & Certification Requirements

Workers with the following job descriptions may be engaged in activities conducted at the site. Only trained and authorized operators shall be permitted to operate the designated equipment.

##### 4.4.1 Hydraulic Excavator w/ Attachments

The excavator operator operates the excavator from within an environmentally controlled cab. The equipment may be equipped with various attachments including but not limited to: buckets of various sizes, bucket with thumb, or hydraulic shears of various types.

##### 4.4.2 Aerial Lift/ Scissor Lift

The aerial lift operator will operate the aerial lift to access areas on various structures to perform inspection, dust removal, abatement or manual work tasks. The aerial lift operator must have prior experience operating an aerial lift and must be capable of training a ground operator to operate the aerial lift ground controls in the event of an emergency. The manufacturer's operator's manual must be onsite at all times.

#### 4.4.3 Truck Driver

The truck driver operates the vehicle from the cab. Trucks are used to haul materials within the site boundary and from the site to waste disposal facilities.

#### 4.4.4 Burners

Persons who use a torch to cut metal pieces to sizes that can be transported safely offsite for disposal or recycling.

#### 4.4.5 Crane Operator

Persons who operate the crane in order to perform lifting activities. Crane Operators must demonstrate training and experience with each type of crane before receiving authorization to begin work. Crane operators must comply with CCR Title 8 Article 15 - Cranes and Derricks.

#### 4.4.6 Riggers

Persons who determine the appropriate attachment points, size of cables, slings or other lifting devices in order that an object may be safely lifted by a crane and moved to another location. The rigger will also direct the crane operator during the lift. Riggers and crane operators also participate in developing lift plans as required.

#### 4.4.7 Laborers

Field laborers will be used during completion of all work activities. In addition to providing assistance where needed for those activities listed in Section 1.4, other work duties will include, but are not limited to, deconstruction of site structure, welding, saw cutting, equipment decontamination, and general site and equipment upkeep and maintenance.

#### 4.4.8 Asbestos & Lead Abatement Personnel

DOSH Certified asbestos abatement personnel will be utilized during completion of asbestos abatement activities in accordance with Title 8 Section 341.6. SCAQMD will be notified at least 10 days prior to commencement of work, as specified in Title 8 Section 341.9.

CDPH Certified Lead Workers will be utilized during completion of lead abatement activities.

#### 4.4.9 Technical Personnel

This group includes the AIS or other personnel serving in various supervisory and data collection functions ranging from management to inspection.

#### 4.4.10 Deconstruction Qualified Person

This person will be on site and provide oversight of deconstruction planning and activities. The Site Supervisor and Project Manager individuals with multiple years of experience, training, and expertise in safe decontamination and deconstruction activities who qualifies as the Qualified Person (QP). A QP will be on-site to supervise all demolition activities.

Prior to initiating any demolition and/or deconstruction activities the QP must survey the areas and features subject to demolition and/or deconstruction. The results of their survey must be in writing, be maintained on the job site and available for review as warranted.

AIS will be in compliance with the provisions in 8 CCR 341(d)(3) and maintain the required permits for deconstruction of structures over 36 feet in height.

#### 4.4.11 Visitors

Visitors to the site not directly involved in proposed work activities will be considered in the HASP as technical personnel listed above. Visitors to the site not directly involved in proposed work activities must check in with the SSO to receive safety orientation and job specific information. Visitors must follow all applicable PPE requirements and remain outside of the exclusion zone and contamination reduction zone (where applicable) while observing activities.

#### 4.4.12 Certification Requirements

Job Description	Certifications/Authorization
Heavy Equipment Operator	AIS Trained and Authorized to Operate + 40 Hour HAZWOPER training + Current Respirator Fit Test
Aerial Lift/ Scissor Lift Operator	AIS Trained and Authorized to Operate + 40 Hours HAZWOPER training + Current Respirator Fit Test
Truck Driver	40 Hour HAZWOPER training + Commercial Driver's License with Hazmat Endorsements
Burners	40 Hours HAZWOPER Training + Hot Work Training + Current Respirator Fit Test
Crane Operator	40 Hour HAZWOPER training + Current Crane Certification by an Accredited Certifying Entity
Riggers	40 Hour HAZWOPER training + Company Trained and Qualified to Perform riggers work
Laborers	40 Hours HAZWOPER Training + Current Respirator Fit Test + Medical
Asbestos Abatement Personnel	32 Hours Worker Initial Training + Competent person + medical 40 Hours HAZWOPER training + Current Respirator Fit Test
Lead Abatement personnel	32 Hours Worker Initial Training + Supervisor + Medical 40 Hours HAZWOPER training + Current Respirator Fit Test
Technical Personnel	40 Hours HAZWOPER training + Current Respirator Fit Test
Deconstruction Competent Person	40 Hours HAZWOPER training + Current Respirator Fit Test
Visitors	Site Specific Safety Orientation

## 5.0 CHEMICAL HAZARDS

Chemicals may be introduced into the body by ingestion, inhalation, or absorption through the skin. Since not all chemicals have the same level of toxicity, the length of time for the exposure and the concentration of the chemical are important in determining the risk. Inhalation and skin contact are the most common routes of entry. Chemicals can be introduced into the body by ingestion when chemicals present on the hands are transferred to food or cigarettes.

High and low pH substances may be encountered during deconstruction activities. Additional PPE may be required when working around these types of chemicals, including poly-coated protective clothing (e.g. Saranax), face shield, gloves (per the SDS) and protective boot covers. Respiratory protection may also be required.

### 5.1 Constituents of Concern

#### Lead

<b>Physical Description:</b> A heavy, ductile, soft, gray solid.	<b>Incompatibilities &amp; Reactivities:</b> Strong oxidizers, hydrogen peroxide, acids
<b>Exposure Routes:</b> inhalation, ingestion, skin and/or eye contact	<b>Target Organs:</b> Eyes, gastrointestinal tract, central nervous system, kidneys, blood, gingival tissue
<b>Symptoms:</b> Lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension	
<b>Personal Protection/Sanitization</b> <b>Skin:</b> Prevent skin contact <b>Eyes:</b> Prevent eye contact <b>Wash skin:</b> Daily <b>Remove:</b> When wet or contaminated <b>Change:</b> Daily	<b>First Aid</b> <b>Eye:</b> Irrigate immediately <b>Skin:</b> Soap flush promptly <b>Breathing:</b> Respiratory support <b>Swallow:</b> Medical attention immediately
<b>Respirator Requirements of 1532.1 (Construction Lead Standard)</b>	
<b>Minimum Respirator Requirements (which might be more stringent than Cal-Recommendations NIOSH/OSHA)</b>	
<b>Level 1 Trigger Tasks</b> Up to 10 x PEL or 500 µg/m <sup>3</sup> :	Air-purifying respirator (half or Full-Face) with a P100 (HEPA) filter

Level 2 Trigger Tasks Up to 25 x PEL or 1250 µg/m <sup>3</sup> :	A powered air-purifying respirator (PAPR) with a HEPA filter.
Level 3 Trigger Tasks Up to 50 x PEL or 2500µg/m <sup>3</sup> :	A supplied-air respirator (SAR) that has a tight-fitting facepiece, operated in continuous flow mode and if there is a potential for IDLH a 10 minute escape bottle will be worn.
Emergency or planned entry into unknown concentrations or IDLH conditions:	A self-contained breathing apparatus (SCBA) that has a full facepiece and is operated in a pressure-demand/positive-pressure mode

## Asbestos

<b>Physical Description:</b> White or greenish (chrysotile), blue (crocidolite), or gray-green (amosite) fibrous, odorless solids.	<b>Incompatibilities &amp; Reactivities:</b> None reported
<b>Exposure Routes:</b> inhalation, ingestion, skin and/or eye contact	<b>Target Organs:</b> respiratory system, eyes
<b>Symptoms:</b> Asbestosis (chronic exposure): dyspnea (breathing difficulty), interstitial fibrosis, restricted pulmonary function, finger clubbing; irritation eyes; [potential occupational carcinogen]	
<b>Personal Protection/Sanitation</b> <b>Skin:</b> Prevent skin contact <b>Eyes:</b> Prevent eye contact <b>Wash skin:</b> Daily	<b>First Aid</b> <b>Eye:</b> Irrigate immediately <b>Breathing:</b> Respiratory support

<p>Remove: No recommendation  Change: Daily</p>	
Respirator Requirements of 1529 (Construction Asbestos Standard)	
<p>Entering any Asbestos Regulated Work Area</p>	<p><b>Minimum Respirator Requirements (which might be more stringent than Cal-OSHA)</b></p> <p>8CCR 1529(h)(3) Respirator selection.</p> <p>(A) AIS shall select, and provide to employees, the appropriate respirators as specified in Section 5144(d)(3)(A))1. The minimum respiratory protection shall be a half-face APR with HEPA filters.</p> <p>(B) AIS shall provide HEPA filters for powered and non-powered air-purifying respirators.</p> <p>(C) AIS shall provide a tight fitting powered, air- purifying respirator in lieu of any negative-pressure respirator selected according to subsection (h)(3)(A) whenever:</p> <ol style="list-style-type: none"> <li>1. An employee chooses to use this type of respirator; and</li> <li>2. This respirator will provide adequate protection to the employee.</li> </ol> <p>(D) AIS shall provide at least a half-face air purifying respirator, equipped with high efficiency filters whenever the employee performs:</p> <ol style="list-style-type: none"> <li>1. Class II and III asbestos work and a negative exposure assessment has not been conducted by the employer;</li> <li>2. Class III jobs where TSI or surfacing ACM or PACM is being disturbed.</li> </ol> <p>(E) In addition to the above selection criteria, when employees are in a regulated area where Class I work is being performed, a negative exposure assessment of the area has not been produced, and the exposure assessment of the area indicates the exposure level will exceed 1 f/cc as an 8-hour time weighted average, employers must provide the employees with a full facepiece supplied-air respirator operated in the pressure-demand mode and equipped with an auxiliary positive pressure self-contained breathing apparatus. When the exposure assessment of the area indicates the exposure level will not exceed 1 f/cc as an 8-hour time weighted average, employers must provide the employees with one of the following respirators:</p> <ol style="list-style-type: none"> <li>1. A tight-fitting powered air-purifying respirator equipped with high efficiency filters;</li> <li>2. A full facepiece supplied air-respirator operated in the pressure-demand mode equipped with HEPA egress cartridges or an auxiliary positive-pressure, self-contained breathing apparatus (SCBA); or</li> <li>3. A full facepiece supplied-air respirator operated in the pressure demand mode equipped with an auxiliary positive pressure self-contained breathing apparatus.</li> </ol>



## Arsenic

<b>Physical Description:</b> Metal: Silver-gray or tin-white, brittle, odorless solid.	<b>Incompatibilities &amp; Reactivities:</b> Strong oxidizers, bromine azide [Note: Hydrogen gas can react with inorganic arsenic to form the highly toxic gas arsine.]
<b>Exposure Routes:</b> inhalation, skin absorption, skin and/or eye contact, ingestion	<b>Target Organs:</b> Liver, kidneys, skin, lungs, lymphatic system
<b>Symptoms:</b> Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, resp irritation, hyperpigmentation of skin, [potential occupational carcinogen]	
<b>Personal Protection &amp; Sanitation</b> <b>Skin:</b> Prevent skin contact <b>Eyes:</b> Prevent eye contact <b>Wash skin:</b> When contaminated/Daily <b>Remove:</b> When wet or contaminated <b>Change:</b> Daily	<b>First Aid</b> <b>Eye:</b> Irrigate immediately <b>Skin:</b> Soap flush promptly <b>Breathing:</b> Respiratory support <b>Swallow:</b> Medical attention immediately
Respirator Requirements of Title 8 CCR 5144	
<b>Emergency or planned entry into unknown concentrations or IDLH conditions:</b>	<b>Minimum Respirator Requirements (which might be more stringent than Cal-OSHA)</b> At a minimum the employees working in an arsenic work area must wear at least a half-face APR with HEPA filters, up to no more than 10 x the PEL or 0.1 mg/m <sup>3</sup> inorganic arsenic. At levels greater than 10 x the PEL and up to no more than 50 x the PEL (0.5 mg/m <sup>3</sup> inorganic arsenic) the worker must at least wear a PAPR with HEPA filters, or leave the work area. No workers will be allowed to work at levels greater than 50 times the PEL value for inorganic arsenic.

## 6.0 BIOLOGICAL HAZARDS

The facility environment is likely to contain spiders and flying insects hazards. Below are some of the more common natural hazards at the site.

### 6.1 Brown Recluse Spiders

During the day, it hides in dark niches and corners, where it may spin a poorly organized, irregular web. It is shy and will try to run from a threatening situation but will bite if cornered. Check boots and protective clothing for spiders prior to putting them. The bite of the brown recluse is usually painless until 3 to 8 hours later when it may become red, swollen, and tender. Later the area around the bite site may develop into an ulcerous sore from 1/2 to 10 inches in diameter. Healing often requires a month or longer, and the victim may be left with a deep scar. Prompt medical attention can reduce the extent of ulceration and alleviate other complications that may develop. It should be noted that not all brown recluse bites result in ulcerations or scarring.

### 6.2 Black Widow Spiders

A female black widow is much more likely to deliver more venom than a male spider. Female black widows are long-legged, shiny, coal-black spiders with an orange, red, or yellow shape on their underside that usually looks like an hourglass but may be another shape. Female black widows are usually about 1.5 in. (3.8 cm) long, but they may be smaller. In most cases of a black widow spider bite, symptoms consist only of minimal to sharp pain followed by swelling and redness at the site of the bite. In some cases, severe symptoms appear within 30 to 60 minutes. These include:

- Muscle cramps and spasms that start near the bite and then spread and increase in severity for 6 to 12 hours.
- Chills, fever, nausea, or vomiting.
- Sweating.
- Severe belly, back, or chest pain.
- Headache.
- Stupor, restlessness, or shock.
- Severe high blood pressure.

If you believe you have been bitten by a black widow spider:

- Get medical help immediately.
- Remain calm. Too much excitement or movement will increase the flow of venom into the blood.
- Apply ice to the bite area.
- Do not apply a tourniquet. It may cause more harm than benefit.
- Try to positively identify the spider or catch it to confirm its type.

### 6.3 Flying Insects

Flying insects such as mosquitoes, wasps, hornets, and bees may be encountered while site activities occur. Wear long-sleeved clothes and long pants treated with repellent if insects are identified on site. Do not treat unexposed skin. Use the repellent according to the manufacturer's recommendations.

provided on the container. Personnel should report flu-like symptoms to the Site Safety Officer, medical attention may be needed.

## 6.4 Other

The facility may have areas of roosting birds and accumulated bird droppings. Bird droppings may contain a disease agent known as Histoplasmosis. Additionally, personnel may also be exposed to other types of animal droppings and mold spores during the demolition work. Dust suppression methods, such as carefully wetting with a water spray, may be useful for reducing the amount of material aerosolized during an activity. For some activities, such as removing an accumulation of bat droppings or bird manure from an enclosed place such as an attic, wearing a NIOSH-approved respirator and other items of personal protective equipment may be needed to further reduce the risk of exposure.

## 7.0 PHYSICAL HAZARDS

### 7.0 Deconstruction

An engineering survey will be conducted by a competent person to determine the condition of the structure, floors, and walls, and possibility of unplanned collapse of any portion of the structure. However, care should be taken when accessing buildings, platforms, stairs and ladders as conditions are subject to change. In addition, once deconstruction begins the structural integrity of the facilities will be compromised as the facilities are deconstructed. AIS employees must be constantly aware of their surroundings and operating heavy equipment. Personnel must stay clear of restricted areas where deconstruction is taking place.

If the structure to be deconstructed has been damaged by fire, flood, explosion, or some other cause, appropriate measures, including bracing and shoring of walls and floors, shall be taken to protect employees and any adjacent structures. It shall also be determined if any type of hazardous chemicals, gases, explosives, flammable material or similar dangerous substances have been used or stored on the site. If the nature of a substance cannot be easily determined, samples shall be taken and analyzed by a qualified person prior to deconstruction and personnel exposure.

Debris should be progressively removed to prevent any build up that could affect the integrity of a suspended floor of the building or structure, affect workplace access and egress, and become a fire hazard, or cause a health and safety hazard. Deconstructed materials should not be allowed to fall freely unless they are confined within a chute (or similar enclosure), shaft and/or exclusion zone.

#### 7.0.1 Manual Deconstruction

Manual deconstruction includes any technique where hand tools such as jackhammers, sledge hammers and picks are used. Manual deconstruction has many of the hazards that are present in other major deconstruction activities including unexpected collapse, falls, falling objects, manual handling and exposure to noise, dust and hazardous chemicals.

To manage the risk of unplanned collapses, the condition of roofs, walls and floors of the building should be assessed by a competent person before commencing deconstruction work. Where concrete members are being deconstructed manually, the reinforcement shall not be cut while breaking of the concrete is in progress.

### 7.0.2 Deconstruction Safe Practices

- Remain a safe distance from the deconstruction zone to reduce exposure to fragmentation of glass, steel, masonry, and other debris during deconstruction operations.
- Do not enter the deconstruction zone unless completely necessary, and only after the competent person has assessed the condition of the structure and has authorized entry.
- Personnel shall be aware of and follow all requirements established by the competent person. The competent person shall inform personnel of the areas that are safe to enter and the areas where entry is prohibited.
- When possible, the competent person should escort personnel while in the deconstruction zone.
- All deconstruction activities that may affect the integrity of the structure or safety of personnel must cease until personnel have exited the deconstruction zone.
- Stay as clear as possible of all hoisting operations.
- Loads shall not be hoisted overhead of personnel.
- Personnel shall wear the appropriate PPE.
- A daily safety briefing/meeting shall be conducted with all deconstruction personnel to discuss the work planned for the day and the HS&E requirements to be followed.
- Deconstruction equipment shall be inspected each day, before use, to ensure safe operational condition.
- The competent person shall inspect the deconstruction area as work progresses to detect hazards resulting from weakened or deteriorated floors, walls, or loosened material. Personnel shall not be permitted to work in areas where such hazards exist until they are corrected by shoring, bracing, or other effective means.
- Appropriate warning and instructional safety signs shall be conspicuously posted where necessary. In addition, a signalman shall control the movement of motorized equipment in areas where the public might be endangered.
- Barricades, where required, shall be secured against accidental displacement and shall be maintained in place except where temporary removal is necessary to perform the work. A watch shall be placed at all openings during the period a barricade is temporarily removed for the purpose of work.
- Fugitive dust must be controlled during deconstruction by using water sprays or other methods.
- Noise must be monitored and controlled as required by state or local regulations. Hearing protection shall be available at the work site for those with sound levels exposures at or above 85 dBA and workers who are exposed to sound levels at or above an 8-hour time-weight average shall be required to wear hearing protection.

### 7.1 Confined Space

The SSO shall identify all potential confined spaces in accordance with Title 8 sections 1950 through 1962. Confined space entry procedures and training requirements following *Title 8 1950 through 1962 and Section 5158* are listed in sections 5.0 through 7.0 of Appendix G. Employees will be trained in accordance with 8 CCR section 1960 including: proper use of PPE required to perform permit space rescues, training to establish proficiency as rescuers, training in first aid and annual practice in making permit space rescues. Should PRCS entry be required, confined space trained AIS employees and equipment will be deployed to the work area prior to commencement of PRCS activities.

The following requirements must be met prior to confined space entry:

- Confined space entrants, attendants, and entry supervisors must complete sufficient training to acquire the understanding, knowledge, and skills necessary for the safe performance of the assigned duties.
- A Confined Space Entry Permit must be completed and posted near the space entrance point for review.
- Each confined space entrant and attendant must attend a pre-entry briefing conducted by the entry supervisor.
- Each confined space entrant and attendant must verify that the entry supervisor has authorized entry and that all permit or certificate requirements have been satisfied.
- Only individuals listed on the confined space permit are permitted to enter the space.
- Each confined space entrant and attendant must verify that atmospheric monitoring has been conducted at the frequency specified on the permit or certificate and that monitoring results are documented and within acceptable safe levels.
- The SSO must be notified for all permit required confined space work.

The following requirements must be met during confined space entry:

- Communication must be maintained between the attendant and entrants to enable the attendant to monitor entrant status.
- Entrants must use equipment specified on the permit.
- All permit requirements must be followed.
- Entrants must evacuate the space upon orders of the attendant or entry supervisor, when an alarm is sounded, or when a prohibited condition or dangerous situation is recognized.
- Entrants and attendants must inform the entry supervisor of any hazards confronted or created in the space, or any problems encountered during entry.
- The attendant will remain outside the confined space.

Please refer to Appendix G of this Health and Safety Plan for detailed confined space entry and rescue.

## 7.2 Working Near Heavy Equipment

Personnel working in the immediate vicinity of heavy equipment (e.g., excavators, loaders, etc.) may encounter physical hazards resulting from contact with equipment. Field personnel should be aware of the presence of these hazards at all times and take appropriate action to avoid them.

Another hazard associated with heavy equipment is the possible lack of visual contact between the operator and ground personnel when mobilizing, positioning, or operating the equipment. Personnel approaching heavy equipment while operating will observe the following protocols:

- Make eye contact with the operator (and spotter).
- Wear brightly colored vest or shirt.
- Signal the operator/driver to cease heavy equipment activity/movement.

- Approach the equipment and inform the operator of intentions.

Due to the limited ability to communicate when wearing respiratory protection, the risk is increased. Workers must be careful to communicate with heavy equipment operators regarding their location, and should maintain a safe distance from operating equipment at all times. Prior to working around equipment, the site personnel will review appropriate hand signals with the operator. In addition equipment will be equipped with back up alarms.

### 7.3 Diesel Equipment Exhaust

For this project AIS will utilize equipment that is in compliance with the California Air Resources Board (CARB). Diesel equipment will be fitted with air scrubbers to minimize or eliminate air pollution within the enclosure. Vehicles with internal combustion engines including diesel powered trucks will not be allowed to idle onsite any more than necessary, with 5 minutes being the maximum allowable. A designated truck staging area will be utilized so that trucks will only be dispatched when the onsite operations are ready for the truck to drive right into the loading area (Reference attachment 5 of the IP). AIS will conduct initial CO monitoring (when internal combustion engines, such as vehicles and generators are first brought indoors) for a period of not more than one hour at 15 minute intervals. Monitoring of the indoor air quality will be conducted with a direct-read, multi-gas meter to measure the indoor air for carbon monoxide (CO), and oxygen (O<sub>2</sub>) levels. The CO and O<sub>2</sub> levels will be monitored by either a 4-way or individual (gas specific) monitor that is calibrated and bump-tested pursuant to the manufacturer's recommendations.

### 7.4 High Pressure Water Washing

- Only personnel who have undergone proper training and who have demonstrated the knowledge and skill, and gained the experience to perform all likely assigned tasks shall operate high pressure water equipment.
- Personnel operating pressure washers shall utilize Level C PPE.
- Before operation, the operator shall clearly define the work area by establishing boundary limits using visible and physical barriers posted with danger or warning signs preventing unauthorized personnel and/or by-standers from entering the work area. Barriers shall be of the warning type or the protective type. Where it is not possible to provide barriers beyond the effective range of the jet, the operator shall erect (if applicable) protective physical barriers to prevent fluids and particles from going beyond the immediate work area.
- The operator shall ensure that it is possible to pressure wash all surfaces to be cleaned, and that a stable, secure working platform is available at all times from which to reach those surfaces. The operator shall maintain sound and secure footing at all times.
- The operator shall insure that all electrical controls are either fail safe, low voltage, or protected with an approved ground fault circuit interrupter.
- At no time shall the operator operate the equipment above the manufacturers rated pressure maximum. The need to operate pressure washing equipment at or below the manufacturer's recommended working pressure shall be stressed.
- The operator shall always increase pressure slowly until required working pressure is reached.

- High pressure water can puncture splash suits and other personal protective clothing. At no time shall the operator point the pressure washer nozzle in the direction of other personnel.
- Prior to operation, the operator shall ensure that all operating controls are in working order. Under no circumstances shall the operator be permitted to tamper with or alter the function of operating control systems.
- The operator shall be aware that the valves and seating surfaces in pressure regulating devices encounter high wear during pressure washing activities. These items shall be inspected frequently to ensure safe operation.
- The operator shall be aware of the proper method of identifying and connecting hoses, including laying out without kinks, protecting hoses from excessive wear, identifying worn and unsafe hoses, and proper tools to use on couplings and fittings.
- The operator shall arrange hoses in a manner to minimize slip, trip and fall hazards.
- Hoses, pipes and fittings shall be supported to prevent excessive sway and/or wear created by vibration or stress on the end connections.
- The operator shall ensure that all hoses are protected from being run over by other vehicles in the area.
- The operator shall not attempt to tighten or tamper with couplings and fittings while the hose is pressurized. Safety connectors shall be used across all hose connections. All fittings shall be clean, leak free and pressure rated before installing.
- The operator shall ensure that hose guards and/or hose shrouds are used at all times to prevent injury if the hose, pipe or fitting breaks open.
- The operator shall inspect the nozzle for blockage and/or damage or imperfections before attaching to the system. The operator shall pressurize the system slowly to make sure that nozzle openings are open and clear.
- The operator shall be familiar with the pressures and flow rates required to effectively perform individual tasks. Within the limits of any restrictions on flow volumes, pressure washing activities shall be performed at the lowest effective pressure.
- The operator shall be familiar with the safe operation of dump valves that allow rapid shut down of the equipment and release of water to atmosphere rapidly reducing the pressure in the system to low level. The operator shall have control of the dump valve at all times. The valve shall be of the type that will automatically activate when the operator releases the control handle, whether the control handle is operated by hand or foot.
- Wash water will be controlled per the Closure Implementation Plan

## 7.5 Torch Cutting Activities

Torch cutting activities may be required for the deconstruction of structures as well as for the size reduction of process equipment and machinery, railings, ladders, platforms and facility process piping. No hot work activities producing heat, sparks, or any other energy sufficient to serve as an ignition

source shall be permitted in any location until a hot work permit has been issued, signed by the supervisor and reviewed by the SSO.

Before hot work is begun, personnel shall determine that a source of ignition can be safely used. In locations where flammable vapors or materials may be present, precautions shall be taken to prevent ignition by eliminating or controlling sources of ignition. A source of ignition shall not be introduced into an area until all of the following required actions have been completed:

- Tests for the presence of flammable gases and vapors shall be made when the concentration of flammable gases or vapors may reasonably be expected to exceed 10 percent of the lower explosive limit (LEL). The tests shall confirm that the concentration of flammable gases and vapors does not exceed 10 percent of the LEL.
- Oil accumulations or other combustible materials shall be removed or protected from ignition when present in exposed areas.

If at any time during the performance of the hot work, subsequent gas testing reveals an LEL of greater than 10 percent, then the hot work is to be immediately stopped and the hot work permit must be re-evaluated. The hot work permit may not be reissued until the source of the flammable vapor is determined and eliminated and further gas testing indicates less than 10 percent LEL.

A full 4A:20BC fire extinguisher must be located at the work area when torch cutting is being conducted, and a fire watch will be posted, 30 minutes prior (for the preparation of the area) to and 60-minutes after work begins and ends. Upon completion of the torch cutting activities the area will be inspected for hot metal, slag, etc.

All oxygen/propane set-ups must have a flashback arrestor check valve installed at the torch head and at the regulators. Oxygen and propane bottles must be secured in a safe place and in good condition. Pre-use inspections should look for corrosion, poor/loose connections, improper parts/fittings, etc. Hoses must be leak free and properly equipped with fittings, gauges, and regulators.

Oxygen and propane cylinders shall be separated for storage at a minimum distance of 20 feet (6.1 m) or by a noncombustible barrier at least 5 feet (1.5 m) high having a fire-resistance rating of at least one-half hour. When cylinders are not in use, manifold and header hose connections must be capped.

Cylinders should be kept far enough away from the actual cutting operation so that sparks, hot slag, or flame will not reach them, when this is impractical, fire blankets will be provided. Cylinders will be placed in safe, well ventilated, and accessible locations. They shall not be located within enclosed spaces or taken into confined spaces.



## 7.6 Aerial Lifts

Below are the hazard controls and safe work practices to follow when working around or operating aerial lifts. The SSO will ensure the safety procedures are followed:

- Operate aerial lifts only if you are authorized and trained to do so.
- Inspect aerial lifts and test lift controls prior to use.
- A body-restraint system (full-body harness with a short lanyard) attached to the work platform will be required for all aerial lifts including scissor lifts.
- Do not attach lanyard to any adjacent structures or equipment while working from an aerial lift.
- Stand firmly on the floor of the platform and do not sit or climb on the railings of the platform, or use planks, ladders, or other devices to increase working height.
- Remain on the platform at all times and do not leave the platform to climb to adjacent structures.
- Position aerial lifts on firm, level surfaces when possible, with the brakes set. Use wheel chocks on inclines. If outriggers are provided, position them on solid surfaces or cribbing.
- Maintain safe clearance distances between overhead power lines and any part of the aerial lift or conducting material, unless the power lines have been de-energized and grounded, or insulating barriers have been installed to prevent physical contact. Maintain at least 10 feet (3 meters) from overhead power lines for voltages of 50 kilovolts (kV) or less, and 10 feet (3 meters) plus 0.4 inches (1.0 cm) for every 1 kV over 50 kV.
- Do not exceed the boom and basket load limits.
- Do not use aerial lifts as cranes, unless specifically designed and approved by the lift manufacturer.
- Do not work or stand below aerial lift operations.
- Do not use aerial lifts when winds exceed 30 miles per hour (48 km per hour) or per manufacturers recommendations.
- Complete the self-assessment checklist for aerial lifts whenever aerial lifts are being used.
- Ensure that the manufacturer's operation manual is on the equipment.
- Ensure that all manufacturer's labels and Cal/OSHA required hazard/warning/caution safety labels are affixed to the unit.

Ensure that proposed safety clearance distances are consistent with those found in 8CCR 2946, See Table 2 excerpt below:

TABLE 2

Boom-type lifting or hoisting equipment clearances required from energized  
overhead high-voltage lines.

	Nominal voltage (Phase to Phase)		Minimum Required Clearance (Feet)
	600.....	50,000	10
over	50,000.....	75,000	11
over	75,000.....	125,000	13
over	125,000....	175,000	15
over	175,000....	250,000	17
over	250,000....	370,000	21
over	370,000....	550,000	27
over	550,000....	1,000,000	42

## 7.7 Noise

Noise is a potential hazard in areas where heavy equipment is being operated. Equipment operation may produce noise levels that reach or exceed 85 decibels (dBA), the action level established by OSHA. Work areas will be monitored for general noise levels using a Sound Level Meter similar to the DSM8930 (General Tools) set to an A weighting (slow response). At the beginning of activities taking place within the work area, noise levels will be monitored once to determine the level of hearing protection required. All personnel associated with deconstruction activities will utilize approved disposable ear plugs or ear muffs with acceptable Noise Reduction Ratings (NRR) and will modify levels of protection based on readings taken by the Sound Level Meter in accordance with Title 8 Section 5097.

The SSO will visually confirm workers hearing protection is properly fitted into the ear. Employees who are observed to be wearing their ear-insert hearing protectors improperly a second time shall be required to wear appropriately NRR ear-muffs. Exposure to elevated noise levels can lead to temporary or permanent hearing loss and can also cause muscle tension and irritability.

The SSO or his designee will monitor new pieces of equipment as they are activated on site. Those pieces of equipment producing sound levels at or above 85 dBA will be monitored more closely (during normal work activities) in order for the SSO to determine if hearing protection will be required by the operator and/or anyone within 10 feet of the equipment of concern. All AIS site personnel participate in the Hearing Conservation Program and receive the required annual training and audiograms.

## 7.8 Fall Protection

Personnel working at the Exide site during Phase 1 closure activities will work from various heights to complete tasks. The following shall be considered as primary fall prevention systems:

- Floor and wall covers
- Guardrail systems
- Periphery railings
- Warning lines
- Controlled access zones

Secondary fall protection systems are necessary when it is impossible to provide primary fall prevention systems. A secondary fall protection system consists of:

- Rated full body harness
- Rated shock absorbing lanyards
- Rated lifelines
- Rated anchor points and attachments

All fall protection systems will be meet ANSI & ASTM standards.

Following general rules for construction, below are the hazard controls and safe work practices personnel will follow when exposed to unprotected heights. The SSO will ensure the safety procedures for fall protection are followed per internal (AIS) standards and Title 8, Subchapter 4, Article 24 (whichever is more stringent):

- Unprotected, elevated work that is 6' or more above the lower level requires a personal fall arrest system. When horizontal lifelines are used, a qualified person will oversee the design, installation, and use of the horizontal lifeline.
- Inspect personal fall arrest system components prior to each use.
- Fall protection equipment and components shall be used only to protect against falls, not to hoist materials.
- Personal fall arrest systems that have been subjected to impact loading shall not be used.
- Attach personal fall arrest systems to anchorage points capable of supporting at least 5,000 pounds (2268 kg). Do not attach personal fall arrest systems to guardrail systems or hoists.
- Remain within the guardrail system when provided. Leaning over or stepping across a guardrail system is not permitted.
- Do not stand on objects (boxes, buckets, structural supports, blocks, etc.) or ladders to increase working height on top of platforms protected by guardrails.

Only one person shall be simultaneously attached to a vertical lifeline and shall be attached to a separate independent lifeline at all times.

In addition, fall protection and arrest activities will be performed in accordance with Title 8 Section 1670 as appropriate for the specific activities pertaining to this project including but not limited to the following items:

- Approved personal fall arrest, personal fall restraint or positioning systems will be worn by AIS employees whose work exposes them to falling in excess of 7 1/2 feet from the perimeter of a structure (i.e. Segment 1, 2, and 3 roofs), unprotected sides and edges, leading edges, openings, sloped roof surfaces steeper than 7:12, or other sloped surfaces steeper than 40 degrees.
- Horizontal lifelines will be designed, installed, and used, under the supervision of the AIS designated qualified person, as part of a complete personal fall arrest system, which maintains a safety factor of at least two.
- Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds.
- When vertical lifelines are used, each employee shall be attached to a separate lifeline.
- Lifelines shall be protected against being cut or abraded.
- Self-retracting lifelines and lanyards which automatically limit free fall distance to 2 feet or less will be capable of sustaining a minimum tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
- Self-retracting lifelines and lanyards which do not limit free fall distance to 2 feet or less, ripstitch lanyards, and tearing and deforming lanyards shall be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
- Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body belts and body harnesses shall be made from synthetic fibers except for when they are used in conjunction with hot work where the lanyard may be exposed to damage from heat or flame.
- Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached.

## 7.9 Manual Handling

Loading and unloading materials (such as supplies, equipment, and tools) presents a variety of hazards. These include cuts and abrasions from sharp objects; back injuries from poor lifting techniques; injuries from setting up and dismantling equipment; crushing injuries from falling or moving loads; pinch points; and impacts between personnel and moving equipment or loads.

The following guidelines will be followed whenever lifting tools, equipment such as portable generators, supplies or any other objects that are of odd size or shape, or that weigh over 50 pounds:

- Personnel shall seek assistance when performing manual lifting tasks that appear beyond their physical capabilities.
- When moving heavy objects such as drums, containers, debris or supplies, use a dolly or other means of assistance.
- Plan the lift. If lifting a heavy object, plan the route and where to place the object. In addition, plan communication signals to be used (i.e., "1, 2, 3, lift," etc.).

- Wear sturdy shoes in good conditions that supply traction when performing lifts.
- Keep your back straight and head aligned during the lift and use your legs to lift the load – do not twist or bend from the waist. Keep the load in front of you – do not lift or carry objects from the side.
- Keeping the heavy part of the load close to your body will help maintain your balance
- When possible, the task should be modified to minimize manual lifting hazards.

## 7.10 Ladders and Scaffolds

### 7.10.1 Ladders

Anytime personnel is working and is exposed to a fall hazard over 4 vertical feet, as measured from the sole of their shoe, personal fall protection will be used.

Exception:

- Maintain at least three points of contact with the ladder at all times.
- Maintains center of body between the ladder's vertical supports.
- Co-worker supports the ladder or it is secured from movement.
- Faces the front of the ladder.

General Portable Ladder Requirements:

- Ladders must not be placed in front of doors opening toward the ladder unless door is blocked, open, locked and posted or guarded.

Ladders shall be capable of supporting the following loads without failure:

- Each self-supporting portable ladder: At least four times the maximum intended load, except that each extra-heavy-duty type 1A metal or plastic ladder shall sustain at least 3.3 times the maximum intended load.
- Only one person on ladder at a time.
- Only fiberglass ladders are allowed. No wood or metal ladders.
- When storing, ladders must be laid on their side or secured with a chain, cable or approved storage device when stored upright.
- Manufacturer's information must be on the side of the ladder.
- Post and/or secure area with cones or barrier tape to keep area separate from other workers.
- Carry tools or equipment in tool belts or bags, handed up or down to different levels or lifted by a mechanical hoist.
- A signage system will be used to communicate the status of the ladder.

### 7.10.2 Scaffolds

- Each scaffold and scaffold component shall be capable of supporting, without failure, its own weight and at least 4 times the maximum intended load applied or transmitted to it (6 times for suspension scaffolding). Personnel will not be allowed to enter or use scaffolding until has been inspected and certified by a Competent Person (CP) and all handrails are in place.

- All scaffolds/work access platforms must be installed by a Competent Person (CP) and inspected by them at least prior to the first use each day of use and/or whenever there has been a potential disturbance of the system.
- Before starting work on a scaffold, inspect visually to determine that:
  - Handrails, mid-rails, toe-boards, and decking are in place.
  - All wheels are locked on movable scaffolds.
  - Locking pins are in place at each joint.
- Do not change or remove scaffold members unless authorized.
- No one is allowed to ride on a rolling scaffold when it is being moved unless approved by SSO. Remove or secure all tools and material on the deck before moving.
- Guard rails, including top and mid rails, and toe-boards must be installed on all open sides and on ends of scaffolds and platforms more than 10 feet above the ground or lower surface.
- Do not climb on, or work from, any scaffold, handrail, mid-rail, or brace member unless the scaffold has been designed by the manufacturer for this purpose. Otherwise use a ladder to access and egress the scaffold.
- All scaffolds must be erected level and plumb, on a firm base and kept clear of debris.
- Scaffolds must be tied off or stabilized with outriggers when the height is more than three times the smaller base dimension. Scaffolds must also be tied off horizontally every 30' feet. Please contact a qualified individual for additional questions and details regarding acceptable tie offs.
- Access ladder or equivalent means of safe access must be provided on all elevated work platforms.
- When space permits, all scaffold platforms must be equipped with standard 42-inch high handrails rigidly secured (not wired), standard 21-inch high mid-rails, completely decked with safety plank or manufactured scaffold decking, and rigidly secured toe-boards, all four sides.
- Adjusting or leveling screws shall not be used on scaffolds equipped with wheels. Adjusting screws shall not be extended more than 12 inches of thread.
- Be sure you know the safe working loads on all scaffolds.
- Do not alter any scaffold member by welding, burning, cutting, drilling, or bending
- Do not rig from scaffold handrails, mid-rails, or braces.
- Patented Metal Scaffolding: Generally, parts and sections of scaffolding made by one manufacturer are not to be used with another manufacturer's.
- Personnel must wear safety harnesses and be properly tied off to designated locations (no guardrails) on any scaffold platform over 6 feet. Only properly trained personnel, who know how to safely locate anchorage points will be allowed to access scaffold. All scaffold intended for personnel access or having the potential for workers to be on it, regardless of height above the ground must be equipped with standard handrails, midrails and a completed deck.
- A signage system will be used to communicate the status of the scaffold.
- Rolling scaffolds will be used only on level, smooth surfaces, or the wheels must be contained in wooden or channel iron runners. Watch for overhead clearance when moving. Casters must be pinned and locked.

- Permits will be acquired by scaffolding contractor in accordance with 8 CCR 341(d)(5)(B) and verified by SSO.

### 7.11 Electrical

- Only qualified personnel are permitted to work on unprotected energized electrical systems.
- Only authorized personnel are permitted to enter high-voltage areas.
- Do not tamper with electrical wiring and equipment unless qualified to do so.
- All electrical wiring and equipment must be considered energized until lockout/tagout procedures are implemented.
- Inspect electrical equipment, power tools, and extension cords for damage prior to use.
- Do not use defective electrical equipment; remove from service.
- All temporary wiring, including extension cords and electrical power tools, must have ground fault circuit interrupters (GFCIs) installed.
- Extension cords must be:
  - Equipped with third-wire grounding
  - Covered, elevated, or protected from damage when passing through work areas
  - Protected from pinching if routed through doorways
  - Not fastened with staples, hung from nails, or suspended with wire
- Electrical power tools and equipment must be effectively grounded or double-insulated and UL approved.
- Operate and maintain electric power tools and equipment according to manufacturer's instructions
- Maintain safe clearance distances between overhead power lines and any electrical conducting material unless the power lines have been de-energized and grounded, or where insulating barriers have been installed to prevent physical contact.
- Maintain at least 10 feet (3 m) from overhead power lines for voltages of 50 kV.
- Temporary lights shall not be suspended by their electric cord unless designed for suspension.
- Protect all electrical equipment, tools, switches, and outlets from environmental elements.

### 7.12 Lockout/Tagout

- Do not work on equipment when the unexpected operation could result in injury, unless lockout/tagout procedures are implemented.
- Employees working under a lockout/tagout procedure must complete sufficient training to acquire the understanding, knowledge, and skills necessary for the safe performance of their assigned duties within the plan.
- Standard lockout/tagout procedures include the following steps:
  - Notify all personnel in the affected area of the lockout/tagout
  - Shut down the equipment using normal operating controls
  - Isolate all energy sources
  - Apply individual lock and tag to each energy isolating device
  - Relieve or restrain all potentially hazardous stored or residual energy
  - Verify that isolation and de-energization of the equipment has been accomplished

- Once verified that the equipment is at the zero energy state, work may begin
- All safe guards must be put back in place, all affected personnel notified that lockout/tagout has been removed, and controls positioned in the safe mode prior to lockout/tagout removal.
- Do not remove another person's lock or tag.
- For new construction, equipment and processes should not be energized (electrical, hydraulic, pneumatic etc.) until all required inspections have been completed and all affected personnel on the project are informed.
- Written energy control procedures will be included in JHAs; will be needed for each machine or piece of equipment where employees are exposed to unexpected energization, start-up, or release of stored energy. JHAs may note that such procedures will be developed prior to employee exposure to hazardous energy. For the Exide project, it is anticipated that all equipment outside of the baghouses will be disconnected from all power sources prior to the start of decontamination.

### 7.13 Fire Prevention

- Fire extinguishers, rated not less than 4A:20BC shall be at the site.
- When 5 gallons (18 L) or more of a flammable or combustible liquid is being used, an extinguisher must be within 50 feet (15 m).
- Extinguishers must:
  - Be maintained in a fully charged and operable condition
  - Be visually inspected each month
  - Undergo a maintenance check and certification each year
- The area in front of fire extinguishers must be kept clear.
- Post "Fire Extinguisher" signs over extinguisher locations.
- Combustible materials stored in the support zone should be at least 10 feet (3m) from any building.
- Oily rags must be kept in a fire resistant, covered container until removed from the site.
- Flammable/combustible liquids must be kept in approved containers, and must be stored in an approved storage cabinet.

### 7.14 General Practices and Housekeeping

- Site work should be performed during daylight hours whenever possible.
- Work conducted during hours of darkness requires enough illumination intensity to see inside the deconstruction area without difficulty.
- Good housekeeping must be maintained at all times in all work areas.
- Common paths of travel should be established and kept free from the accumulation of materials or debris.
- Keep access to exits, ladders, stairways, scaffolding, and emergency equipment free from obstructions.
- Specific areas should be designated for the proper storage of materials.
- Tools, equipment, materials, and supplies shall be stored in an orderly manner.
- As work progresses, scrap and unessential materials must be neatly stored or removed from the work area.



- Containers should be provided for collecting clean trash and shall be removed at regular intervals.
- All spills shall be quickly cleaned up.
- Oil and grease shall be cleaned from walking and working surfaces.

## 8.0 AMBIENT MONITORING FOR PERSONNEL PROTECTIVE EQUIPMENT

Ambient air monitoring to be conducted by the SSO or designee when there is a question of employee exposure to hazardous concentrations of substances to assure the proper selection of engineering controls, work practices, and PPE. Additional monitoring should be conducted under any of the following circumstances:

- Work begins on a different portion of the site.
- Change in job tasks.
- Change in weather.
- Change in ambient levels of hazardous constituents as indicated by the monitor.
- When new hazardous substances are encountered.
- During high-risk operations (e.g. tank cleaning, drum opening, handling of leaking drums, or when working in areas with obvious liquid contamination).

Ambient air monitoring will be conducted using direct-reading real-time instruments. Not all work at the site will require ambient air monitoring for all contaminants. During the mobilization phase of a particular project task or activity, either the PM or the SSO will determine what contaminants may be encountered in order to have the appropriate instrumentation on-site.

Under stable site conditions, ambient air monitoring will be conducted at the beginning of each day and at least once every hour in the workers' breathing zone and at other locations based on the professional judgment of the SSO. If site conditions become unstable or change dramatically, ambient air monitoring will be conducted more frequently based on the professional judgment of the SSO and/or the workers will leave the work area. This section does not address real-time air monitoring or perimeter air monitoring required by the Closure Plan.

## 8.1 Ambient Air Monitoring Instruments

Constituent	Action Response Level (4 & 5-way gas meter are pre-set to alarm at these levels for O <sub>2</sub> , LEL, H <sub>2</sub> S and CO)
Oxygen	Below 19.5% to above 23.5%
Combustible Gases- LEL	≥10 % LEL
Hydrogen Sulfide - H <sub>2</sub> S	≥ 10 ppm sustained for a duration of two minutes
Carbon Monoxide – CO	≥ 25 ppm sustained for a duration of two minutes
Volatile Organic Compounds - VOCs	≥ 5ppm sustained for a duration of two minutes

*Note: Time will be allotted for real time air monitoring instruments to properly equilibrate with the measured environment. Minor deviations during this equilibration period will not be grounds for immediate Action Response. AIS will initiate required monitoring before workers enter the area or begin work.*

A direct-reading monitor such as a MultiRAE Wireless personal 5 gas monitor or equivalent, capable of measuring real time concentration in air will be used on site. All direct reading instruments will be calibrated daily per manufacturer's instructions. Cylinders of the appropriate calibration gas will be required for fieldwork lasting longer than 1 day. Calibration data will be recorded on the monitor calibration log sheet. Should the gas monitor alarm the employees will safely stop work and immediately leave the area (going to the predesignated evacuation location) until the Project Manager and Site Safety Officer (and/or other site personnel depending upon the circumstances) are able to determine the cause and solution to the alarm and ensure the work area is safety for re-entry.

## 8.2 Personal Air Sampling

Air monitoring will be conducted by collecting samples with low volume samplers on 37mm, 0.8 um pre-weighed (PW) or Mixed Cellulose Ester membrane (MCE) cassettes for total lead or PW PVC filter cassettes for, arsenic, silica, and dust. Asbestos samples will be collected by using 25mm, 0.8um MCE filters, meeting NIOSH specifications. Air samples will be collected in the breathing zone for each task being conducted. The sampling will be biased towards individuals with the expected greatest exposure potential.

This will be accomplished by using one SESBDX-X BDK sampling pump per every five workers to collect samples that represent the breathing zone. Samples will be collected from the workers in close proximity to the abatement, deconstruction, and ensuing work. The airflow rate through these battery-

operated samplers will be set at 2 liters/minute and will be checked with a flow meter placed in line with the appropriate sampling cartridge. The air sampling pumps will be calibrated each morning prior to being placed on the workers. Samples shall be representative of a full shift including at least one sample for each job classification in each work area either for each shift or for the shift with the highest exposure level.

#### 8.2.1 Frequency of Sampling

The samplers to be used for lead dust monitoring will be fitted with an AMC 738 MCE sampling cassettes for lead. The filters will be analyzed using atomic absorption (AA) spectroscopy as per method NIOSH 7105 and 7082 in order to determine lead concentrations.

Samples will be obtained once the initial work activity commences and will continue for a minimum of three (3) consecutive days in order to characterize potential worker exposures. The air samples will be collected over an eight- to ten-hour period each day that the site disturbance activities are conducted. One “trip blank” for lead dust will be taken along with the samples and included for analysis. Air sampling will be performed for the duration of field activities conducted in hazardous areas of the site or after analyzing the sample data AIS’s health and safety officer determines that air sampling is not required.

#### 8.2.2 Record Keeping

All records will be compiled and made available to employees and their representatives by AIS for the project duration. Documentation will be archived in accordance with Title 8 section 3204, retained for the required 30 years, and made available to employees and their representatives.

Annual training for respiratory protection will be kept current for each person working on site. Dates of training will vary, based upon their most recent certification. Copies of all certifications, including annual respiratory protection training will be kept on site and made available to DTSC, Cal/OSHA, and Exide personnel.

#### **Records will include the following:**

- Pre-calibration (before personal air sampling begins).
- Post-calibration (after personal air sampling has been completed).
- Field observations.
- Calculations and chain-of-custody forms.
- Lead, and arsenic analytical results.
- Daily monitoring will be recorded in the log book.

### 8.3 Action Levels and Response Action Requirements

The table below outlines the steps to be taken by the SSO when the action levels of the various contaminants are exceeded. Respiratory protection will be selected based on occupational exposure

limits of the constituents at the site and the potential for exposure to vapors and dust from site activities. The COCs to be monitored for are Lead, Asbestos, Arsenic, Silica, and Dust. Air sampling frequency will take place as work hours dictate. Particulates will be captured in personal air monitors and analyzed for concentrations. Air sample cartridges will be turned into a lab for analysis with turnaround times ranging between 1 and 5 days. Technicians will begin work in the most stringent (Level C) PPE appropriate for the given task & COC then only downgrade if analytical data proves it is safe to do so.

This monitoring will be accomplished by using one SESBDX-X BDK sampling pump per every five workers to collect samples that represent the breathing zone. Samples will be collected from the workers in close proximity to the abatement, deconstruction, and ensuing work. The airflow rate through these battery-operated samplers will be set at 2 liters/minute and will be checked with a flow meter placed in line with the appropriate sampling cartridge. The air sampling pumps will be calibrated each morning prior to being placed on the workers. Samples shall be representative of a full shift including at least one sample for each job classification in each work area either for each shift or for the shift with the highest exposure level. The samplers to be used for lead dust monitoring will be fitted with an AMC 738 MCE sampling cassettes for lead. The filters will be analyzed using atomic absorption (AA) spectroscopy as per method NIOSH 7105 and 7082 in order to determine lead concentrations.

Samples will be obtained once the initial work activity commences and will continue for a minimum of three (3) consecutive days in order to characterize potential worker exposures. The air samples will be collected over an eight- to ten-hour period each day that the site disturbance activities are conducted. One “trip blank” for lead dust will be taken along with the samples and included for analysis. Air sampling will be performed for the duration of field activities conducted in hazardous areas of the site or after analyzing the sample data AIS’s health and safety officer determines that air sampling is not required.

Chemical	Action Levels	Response Actions
Inorganic Lead	PEL = 0.05 mg/m <sup>3</sup> Action Level < 0.03 mg/m <sup>3</sup>	<p>Only CDPH lead certified workers will be allowed in the lead abatement work areas. No lead abatement/disturbance work will commence unless/until all non-essential and/or non-certified personnel have been removed from the regulated work zone.</p> <p>Pursuant to Section 5.1 above, the minimum respiratory protection allowed for lead work will be a half-face APR with HEPA filters.</p> <p>Dust suppression and good work habits will be employed during lead related activities.</p>

		<p>Employees monitored will be given their individual exposure results in writing within 5 days from receiving them (i.e., from the lab or hygienist).</p>
Asbestos	<p>PEL = 0.1 f/cc Excursion Limits (30 minutes) = 1 f/cc</p>	<p>Only DOSH trained/certified workers will be allowed in the asbestos regulated work areas. No asbestos abatement/disturbance work will commence unless/until all non-essential and/or non-certified personnel have been removed from the regulated work zone.</p> <p>Pursuant to Section 5.1 above, the minimum respiratory protection allowed for asbestos work will be a half-face APR with HEPA filters.</p> <p>Dust suppression, with amended water, and good work habits will be employed during asbestos related activities.</p> <p>Employees monitored will be given their individual exposure results in writing within 5 days from receiving them (i.e., from the lab or hygienist).</p>
Inorganic Arsenic	<p>PEL = 0.01 mg/m<sup>3</sup> Action Level &lt; 0.005 mg/m<sup>3</sup></p>	<p>Only workers who have received HAZWOPER training and/or who are CDPH Certified Lead workers and/or DOSH Asbestos workers and who have had Arsenic Awareness training shall be allowed to work in an area where there might be an arsenic exposure at or above the AL.</p> <p>Pursuant to Section 5.1 above, the minimum respiratory protection allowed for arsenic related work will be a half-face APR with HEPA filters.</p> <p>Dust suppression and good work habits will be employed during activities that may contain arsenic.</p> <p>Employees monitored will be given their individual exposure results in writing within 5 days from receiving them (i.e., from the lab or hygienist).</p>

Silica (Quartz)	<p>PEL Quartz, Respirable 0.05 mg/m<sup>3</sup>  Cal-OSHA PEL: respirable crystalline silica 50 ug/m<sup>3</sup></p>	<p>Only workers who have received HAZWOPER training and/or who are CDPH Certified Lead workers and/or DOSH Asbestos workers and who have had Silica Awareness training shall be allowed to work in an area where there might be a silica exposure at or above the PEL.</p> <p>Pursuant to 8CCR 5144, the minimum respiratory protection allowed silica related work will be a half-face APR with HEPA filters. Dust suppression and good work habits will be employed during concrete breaking activities.</p>
Nuisance Dust	<p>PEL for Total Dust = 10 mg/m<sup>3</sup>  PEL for Respirable Dust = 5 mg/m<sup>3</sup></p>	<p>Dust suppression will be an ongoing activity throughout this project, when dust producing activities are being conducted. If visible dusts are observed away from the immediate work area the work activities shall stop until the water suppression can suppress the dust or the work activities can be changed and/or until the wind (if the wind was the root cause) dies down.</p> <p>Although a half-face APR with HEPA filters may be worn at or above the PEL (up to 10 times the PEL), work will be stopped if the PEL is achieved.</p>
H <sub>2</sub> S	<p>Cal-OSHA PEL: 10 ppm  STEL: 15 ppm  Ceiling: 50 ppm</p> <p>ACGIH TLV: 1 ppm  STEL: 5 ppm  IDLH: 100 ppm</p> <p>Action Response Required: 5ppm sustained for a duration of 2 minutes</p>	<p>Only workers who have received HAZWOPER training (and current SCBA/SAR training) shall be allowed to work in an area where there might be H<sub>2</sub>S exposure at or above the STEL.</p> <p>Workers will evacuate the area should levels rise above permissible exposure limits</p>
CO	<p>PEL: 25 ppm Ceiling 200 ppm.  12,000 ppm IDLH</p> <p>Action Response Required: 25 ppm sustained for a duration of 2 minutes.</p>	<p>Only workers who have received HAZWOPER training (and current SCBA/SAR training) shall be allowed to work in an area where there might be CO exposure at or above the STEL.</p>

		Workers will evacuate the area should levels rise above permissible exposure limits.
O <sub>2</sub>	Cal OSHA does not maintain exposure limits for Oxygen.  Action Response Required: below 19.5% or above 23.5%.	Workers will evacuate the area should levels rise above or fall below permissible exposure limits.
VOC	Action Response Required: 5ppm sustained for a duration of 2 minutes.	Workers will evacuate the area should levels rise above permissible exposure limits.
LEL	Action Response Required: 10% of LEL (i.e. Methane = 5,000 ppm)	Workers will evacuate the area should levels rise above permissible exposure limits.

*Note: Time will be allotted for real time air monitoring instruments to properly equilibrate with the measured environment. Minor deviations during this equilibration period will not be grounds for immediate Action Response. AIS will initiate required monitoring before workers enter the area or begin work.*

## 9.0 PERSONAL PROTECTIVE EQUIPMENT

Engineering controls and work practices designed to reduce and maintain employee exposure at or below the permissible exposure limit (PELs) for the contaminants of concern will be implemented. Whenever engineering controls and work practices are not feasible, a reasonable combination of engineering controls, work practices and personal protective equipment (PPE) shall be used to reduce and maintain employee exposure at or below the permissible exposure limits for the contaminants of concern.

For the purpose of this HASP, all site activities within the Exclusion Zone will require Level C personal protection at a minimum, unless it is determined through the hazard analyses process that a less restrictive level of protection is required. Activities conducted outside the established Exclusion Zones will require Basic Level D personal protection. When personnel are working in disposable coveralls extreme care will be maintained to ensure that personnel do not become susceptible to heat-related stresses.

The SSO will be responsible for monitoring for heat-related stress in accordance with Title 8 CCR 3395. See Appendix F including Heat Illness Prevention Program. More specifically, the SSO will follow instructions in Title 8 CCR 3395:

“(c) Provision of water. Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable, including but not limited to the requirements that it be fresh, pure, suitably cool, and provided to employees free of charge. The water shall be located as close as practicable to the areas where employees are working. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the

beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water, as described in subsection (h)(1)(C), shall be encouraged.

(d) Access to shade.

(1) Shade shall be present when the temperature exceeds 80 degrees Fahrenheit. When the outdoor temperature in the work area exceeds 80 degrees Fahrenheit, the employer shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate the number of employees on recovery or rest periods, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. The shade shall be located as close as practicable to the areas where employees are working. Subject to the same specifications, the amount of shade present during meal periods shall be at least enough to accommodate the number of employees on the meal period who remain onsite.

(2) Shade shall be available when the temperature does not exceed 80 degrees Fahrenheit. When the outdoor temperature in the work area does not exceed 80 degrees Fahrenheit employers shall either provide shade as per subsection (d)(1) or provide timely access to shade upon an employee's request.

(3) Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times. An individual employee who takes a preventative cool-down rest (A) shall be monitored and asked if he or she is experiencing symptoms of heat illness; (B) shall be encouraged to remain in the shade; and (C) shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than 5 minutes in addition to the time needed to access the shade.

(4) If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, the employer shall provide appropriate first aid or emergency response according to subsection (f) of this section.

Exceptions to subsections (d)(1) and (d)(2):

(1) Where the employer can demonstrate that it is infeasible or unsafe to have a shade structure, or otherwise to have shade present on a continuous basis, the employer may utilize alternative procedures for providing access to shade if the alternative procedures provide equivalent protection.



(2) Except for employers in the agricultural industry, cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if the employer can demonstrate that these measures are at least as effective as shade in allowing employees to cool.

(e) High-heat procedures. The employer shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit. These procedures shall include the following to the extent practicable:

(1) Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.

(2) Observing employees for alertness and signs or symptoms of heat illness. The employer shall ensure effective employee observation/monitoring by implementing one or more of the following:

(A) Supervisor or designee observation of 20 or fewer employees, or

(B) Mandatory buddy system, or

(C) Regular communication with sole employee such as by radio or cellular phone, or

(D) Other effective means of observation.

(3) Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.

(4) Reminding employees throughout the work shift to drink plenty of water.

(5) Pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary.

(6) For employees employed in agriculture, the following shall also apply:

When temperatures reach 95 degrees or above, the employer shall ensure that the employee takes a minimum ten minute net preventative cool-down rest period every two hours. The preventative cool-down rest period required by this paragraph may be provided concurrently with any other meal or rest period required by Industrial Welfare Commission Order No. 14 (8 CCR 11140) if the timing of the preventative cool-down rest period coincides with a required meal or rest period thus resulting in no additional preventative cool-down rest period required in an eight hour workday. If the workday will extend beyond eight hours, then an additional preventative cool-down rest period will be required at the conclusion of the eighth hour of

work; and if the workday extends beyond ten hours, then another preventative cool-down rest period will be required at the conclusion of the tenth hour and so on. For purposes of this section, preventative cool-down rest period has the same meaning as “recovery period” in Labor Code Section 226.7(a).

(f) Emergency Response Procedures. The Employer shall implement effective emergency response procedures including:

(1) Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor or emergency medical services when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable. If an electronic device will not furnish reliable communication in the work area, the employer will ensure a means of summoning emergency medical services.

(2) Responding to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.

(A) If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor shall take immediate action commensurate with the severity of the illness.

(B) If the signs or symptoms are indicators of severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), the employer must implement emergency response procedures.

(C) An employee exhibiting signs or symptoms of heat illness shall be monitored and shall not be left alone or sent home without being offered onsite first aid and/or being provided with emergency medical services in accordance with the employer's procedures.

(3) Contacting emergency medical services and, if necessary, transporting employees to a place where they can be reached by an emergency medical provider.

(4) Ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

(g) Acclimatization.

(1) All employees shall be closely observed by a supervisor or designee during a heat wave. For purposes of this section only, “heat wave” means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

(2) An employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.

(h) Training.

(1) Employee training. Effective training in the following topics shall be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness:

(A) The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.

(B) The employer's procedures for complying with the requirements of this standard, including, but not limited to, the employer's responsibility to provide water, shade, cool-down rests, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation.

(C) The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.

(D) The concept, importance, and methods of acclimatization pursuant to the employer's procedures under subsection (i)(4).

(E) The different types of heat illness, the common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses to the different types of heat illness, and in addition, that heat illness may progress quickly from mild symptoms and signs to serious and life threatening illness.

(F) The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers.

(G) The employer's procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.

(H) The employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider.

(I) The employer's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These

procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

(2) Supervisor training. Prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness effective training on the following topics shall be provided to the supervisor:

(A) The information required to be provided by section (h)(1) above.

(B) The procedures the supervisor is to follow to implement the applicable provisions in this section.

(C) The procedures the supervisor is to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures.

(D) How to monitor weather reports and how to respond to hot weather advisories.

(i) Heat Illness Prevention Plan. The employer shall establish, implement, and maintain, an effective heat illness prevention plan. The plan shall be in writing in both English and the language understood by the majority of the employees and shall be made available at the worksite to employees and to representatives of the Division upon request. The Heat Illness Prevention Plan may be included as part of the employer's Illness and Injury Prevention Program required by section 3203, and shall, at a minimum, contain:

(1) Procedures for the provision of water and access to shade.

(2) The high heat procedures referred to in subsection (e).

(3) Emergency Response Procedures in accordance with subsection (f).

(4) Acclimatization methods and procedures in accordance with subsection (g).

Note: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code."

PPE Level	Ensemble Components	Tasks Requiring Use
<p><i>Level D</i></p> <p>Should be worn only as a work uniform and not in any area with respiratory or skin hazards. It provides minimal protection against chemical hazards.</p>	<ul style="list-style-type: none"> <li>• Hard Hat NIOSH approved</li> <li>• Steel toe work boots</li> <li>• Safety glasses NIOSH approved</li> <li>• Cut-resistant gloves</li> <li>• Long sleeves shirt/pants</li> <li>• High visibility traffic vest</li> <li>• Hearing protection (as necessary)</li> </ul>	<p>Workers performing any tasks in Contamination Reduction Zone (CRZ) or Support Zone (SZ).</p>

	<ul style="list-style-type: none"> <li>• Face shield (as necessary)</li> </ul>	
<p><i>Level C</i></p> <p>Should be worn when the criteria for using air purifying respirators are met, and an increased level of skin protection is needed.</p>	<ul style="list-style-type: none"> <li>• Hard Hat NIOSH approved</li> <li>• Full or Half face respirator (P100/OV combination)</li> <li>• Tyvek coveralls (for dust)</li> <li>• Nitrile gloves inner/outer</li> <li>• Chemical resistant boots with steel toe</li> </ul>	Activities which meet the action levels based on direct read instrumentation.
<p><i>Level B</i></p> <p>Should be worn when the highest level of respiratory protection is needed, but such that the level of skin protection needed does not need to be gas tight.</p>	Not authorized	Tasks requiring Level B PPE are not anticipated during this project. If Level B PPE is needed, as determined by the SSO the HASP will be revised.
<p><i>Level A</i></p> <p>Should be worn when the highest level of respiratory, skin, and eye protection is needed.</p>	Not authorized	Tasks requiring Level A PPE are not authorized during this project. If Level A PPE is needed, as determined by the SSO the HASP will be revised.

## 9.1 Respiratory Protection

During the deconstruction activities, respiratory protection is required whenever work is performed inside the exclusion zone to protect the workers from exposures to contaminants, these contaminants can be in the form of gases, vapors, mist or dust. The type of respiratory protection required will be based on the results of personal monitoring breathing zone and/or ambient air monitoring, and the professional judgment of either the SSO.

The cartridges to be used during this project will be replaced after no more than 8 hours. In addition to the 8 hour change-out schedule, personnel will immediately change-out cartridges under the following conditions:

- When odors are detected by the wearer.
- When breathing becomes too difficult.
- When cartridges become wet or damage (which will occur if/when showering out from a work area such as asbestos as the decontamination requirements include doffing the respirator last while in the shower).

## 9.2 Supplied Air Respiratory Protection

The use of supplied air respiratory protection is currently not contemplated for this project. Should a scenario arise where a respiratory hazard at the site that can be considered “immediately dangerous to life or health” (IDLH) it will constitute **STOP WORK** and a full stand down to evaluate the project conditions. At that time, a plan for the use of Supplied Air Respirators may be developed if the IDLH hazard cannot be mitigated. Respiratory hazards are classified as IDLH as follows:

- There is a lack of oxygen (less than 19.5% oxygen).
- The amount of chemical in the air is known or expected to be above the IDLH level for that chemical. See the NIOSH Pocket Guide to Chemical Hazards for chemical IDLH levels.
- Levels of chemicals above IDLH can occur in confined spaces, or enclosed spaces where there is little or no ventilation.

**IMPORTANT NOTE:** All individuals who may be required to wear a respirator, must first have received medical clearance from Western Medical Group, or appropriate occupational health facility, and must pass a Qualitative Respirator Fit-Test. All respirators will be stored in clean locations on the site, respirators should be cleaned and sanitized daily and cleaned according to the manufacturer’s instructions. In addition, those wearing full-face piece respiratory protection and who also need to wear glasses shall either have a spectacle case and lenses or wear contact lenses (glasses may not be worn inside a full-face piece respirator).

## 10.0 MEDICAL SUPPORT REQUIREMENTS

First aid supplies will be made available to all personnel on site. A list of first aid supplies and equipment on-hand at the project site includes:

- First-aid kit(s) located in the AIS field office area, as well as in AIS support trucks.
- A Fire extinguisher will be located in the AIS field office, as well as in AIS support.
- Eye wash stations located in the field office and designated safety station(s) per Title 8 section 5162.

Additionally, in case of non-emergency situations, initial medical care is offered to injured employees through U.S Health Works. An injured employee or Supervisor can reach a qualified occupational nurse or physician for advice on the appropriate treatment method by calling 323-588-7162. **U.S Health Works should be called for consultation for a non-emergency injuries or illnesses.**

For the duration of the project, at least one individual currently certified to render emergency first aid and/or CPR will be present during all work activities; this person and a back-up (in case primary responsible person is rendered incapacitated) should be identified each morning during the tailgate safety meeting. Additional medical surveillance will be provided for employees who are injured, become ill or develop signs or symptoms due to possible exposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation.

A first aid kit containing first aid items for minor incidents only, a fire extinguisher, and a portable eye wash will be maintained in the AIS Field Office, each AIS vehicle, and the support zone in the tented

work area. Fire extinguishers will be located on the cab of each piece of heavy equipment and with a fire watch for any hot work. In addition, a 20-pound ABC fire extinguisher will be located with 75 feet of the fueling location. SSO will communicate additional locations during safety meetings.

The SSO is responsible for performing a weekly inventory of the first aid kit to make sure it meets at least the ANSI/ISEA Z308.102009 minimum requirements for Type 3 (Construction) First Aid Kits and Supplies.

The SSO will be responsible for ensuring that all fire extinguishers are inspected monthly as required by Title 8 CCR 6151 Portable Fire Extinguishers. The monthly inspections will be documented on a tag attached to each extinguisher or a master list of fire extinguishers and their location. If the duration of the project exceeds one year, the SSO will contract with an outside vendor to perform the annual maintenance on all fire extinguishers.

## 10.1 Communications

Cell phones will be used for primary communication between the project team and the Client. Cell phones cannot be used while driving any type of vehicle. Emergency communications will include the use of air horns to immediately notify all employees of an emergency.

2-way radios and/or cell phones will be used for communication between the key members of the project team while on site. Key members/places to have radios include the office trailer, deconstruction site Project Manager, subcontractor foreman, and the SSO.

## 11.0 INFRASTRUCTURE AND CONTROL

### 11.1 General Site Rules

The following general rules will be adhered to at all times:

- All personnel entering the site must check in with the SSO.
- All individuals entering the site must demonstrate to the SSO that they have been adequately trained as defined elsewhere in this HASP.
- All individuals must be familiar with emergency communication methods and how to summon emergency assistance.
- Drugs and alcohol are strictly prohibited on site. Use of alcoholic beverages before, during operations, or immediately after hours is absolutely forbidden. Alcohol can reduce the ability to detoxify compounds absorbed into the body as the result of minor exposures and may have negative effects with exposure to other chemicals. In addition, alcoholic beverages will dehydrate the body and intensify the effects of heat stress.
- Horseplay of any type is forbidden.
- Weapons including knives and guns are prohibited on site.
- All unsafe conditions will be immediately reported to the SSO, who will document such conditions in the field log. The SSO will be responsible for ensuring that the unsafe condition is corrected as quickly as possible.

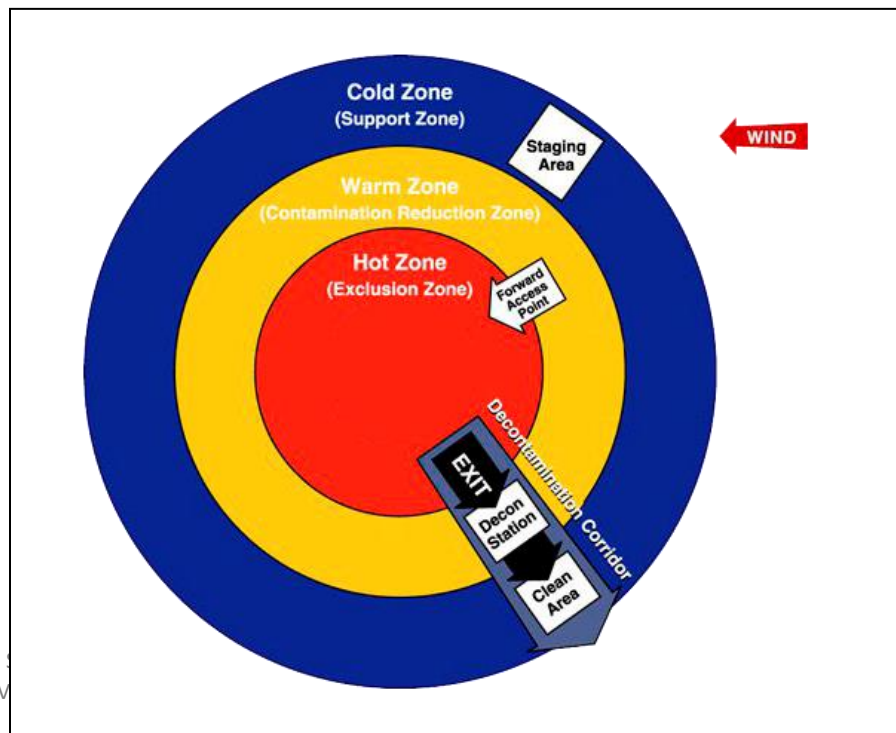
- No smoking, eating, chewing gum or tobacco, taking medication, or applying cosmetics in the Contamination Reduction Zone or the Exclusion Zone. Wash hands and face thoroughly prior to conducting the activities in the Support Zone.
- Smoking, matches, and lighters are only allowed in the designated smoking area.
- Avoid contact with potentially contaminated substances. Avoid, whenever possible, kneeling on the ground, or leaning or sitting on trucks, equipment or the ground. Do not place equipment on potentially contaminated surfaces.
- If PPE becomes torn or saturated with contaminated material, immediately leave the Exclusion Zone, go through the decontamination steps, and replace the affected PPE. Additionally, wash any exposed skin thoroughly with soap and water.

The SSO will be responsible for determining what site work can be performed safely in the rain and at what point work will cease due to either quality or safety issues. In the event of thunder and/or lightning, all work will be suspended until 15 minutes have elapsed from the last clap of thunder or flash of lightning. During rain, lightning and/or thunder events, site workers should seek shelter in either a building or vehicle.

## 11.2 Site Access Controls

The safety and wellbeing of the Public is a priority concern, and will be a key component of all risk assessments performed for each scope of work to be performed. The project areas are fenced and gates will remain closed at all times. If a gate is open for site access related to work activities, an employee will be posted at the open gate at all times.

AIS personnel will delineate the active work zone, safe observation distances, Exclusion Zones, Contamination Reduction Zones and Support Zones (as applicable) for all deconstruction-related tasks. As the project progresses the locations and sizes of these zones may change. AIS will provide updates to all site parties as the various zones change shape (see example below).





AIS will establish a traffic management plan identifying travel paths and site roadways to be used during project activities. This plan will be updated during the project as progress is made and site conditions change. All site visitors must access the site via the designated entrance gate and sign in at the field office. An EXIDE security guard will be onsite for the duration of the project.

### 11.3 Work Zones

An exclusion zone (EZ), contamination reduction zone, and support zone will also be established and demarcated with delineators (as applicable). As the size of the EZ grows and changes, the delineators will be moved and/or adjusted. Signs will be posted indicating limited access to the EZ, updated maps showing zones will be kept in field office as work phases progress and zones change.

### 11.4 Contamination Reduction Zone

A contamination reduction zone (CRZ) will be located adjacent and at the entrance to the EZ and will be the location of all personnel decontamination. This will vary throughout each phase of the project, but will always be in between the exclusion zone and support zone.

### 11.5 Support Zone

The support zone will be located outside of the CRZ and will include all other areas that are not a part of either the EZ or CRZ. The support zone will be the designated location for all support activities.

### 11.6 Visitors, Inspectors, and Media

All project visitors are to be directed to the AIS field office. In the event that a visitor does enter the work area, stop work, escort the person out of the work area, and notify the SSO or PM immediately. All questions regarding the site and work activities should be directed to the EXIDE representative, commenting on project details shall be avoided.

### 11.7 Buddy System

The buddy system will be used when possible, and every effort should be made to have more than one person on site at all time.

### 11.8 Smoking and Eating Areas

Smoking will only be allowed in designated areas. Upon mobilization at the site, the SSO will establish smoking areas per site-specific or client-specific requirements. Individuals caught smoking outside the designated smoking areas will be subject to disciplinary action up to and including immediate removal from the site.

Upon mobilization at the site, the SSO will establish eating and break areas per site-specific or client-specific requirements. Eating will only be allowed in the designated areas and the areas will be maintained in a clean and sanitary condition. Employees will wash their hands and face before entering eating areas.

### 11.9 Sanitation and Potable Water

Containers used for drinking water will be equipped with a tap and capable of being tightly closed. In addition, the container will be labeled as “Drinking Water” or “Potable Water.” Disposable cups will be stored in a sanitary condition and a receptacle for disposing of the cups will be near-by.

Portable toilets will be available for site personnel and centrally located to the task being performed. Additionally, hand washing facilities will also be provided and will be stocked with hand soap and paper towels. Portable toilets and hand washing facilities will be located in the support zone.

Trash cans and recycle containers will be located adjacent to the above facilities and emptied regularly. Employees will not dispose of refuse in the work area.

### 11.10 Temporary Facilities

Where needed, trailers and other temporary structures used as field offices or for storage will be anchored with rods and cables or by steel straps to ground anchors. The anchor system will be designed to withstand winds and must meet applicable state or local regulations for the anchoring of mobile trailer homes.

All temporary facilities will be maintained in a clean and sanitary condition to discourage the entrance of rodents or vermin. If rodents or vermin become an issue, the SSO will be responsible for implementing an extermination program per site-specific or client-specific guidelines.

### 11.11 Work Area Lighting

Deconstruction, loading, stairways, passageways, and working areas shall be lighted while work is in progress by no less than the minimum illumination intensities in the following table. A light meter will be utilized to quantify the lighting intensities in real-time within the containment building. The readings obtained will be compare to the levels in the table below.

Minimum Illumination Intensities in Foot-Candles	
<i>Foot candles</i>	<i>Area or operations</i>
5	General site areas.
3.	Excavation and waste areas, access ways, active storage areas, loading platforms, refueling, and field maintenance areas.

5	Indoors: Warehouses, corridors, hallways, and exit ways.
5	Tunnels, shafts, and general underground work areas. (EXCEPTION: Minimum of 10 foot-candles is required at tunnel and shaft heading during drilling, mucking, and scaling. Mine Safety and Health Administration approved cap lights shall be acceptable for use in the tunnel heading.)
10	General shops (e.g., mechanical and electrical equipment rooms, active storerooms, barracks or living quarters, locker or dressing rooms, dining areas, and indoor toilets and workrooms.)
30	First aid stations, infirmaries, and offices.

## 12.0 DECONTAMINATION PROCEDURES

Decontamination involves the orderly controlled removal of contaminants from both personnel and equipment. The purpose of decontamination procedures is to prevent the spreading of contaminated materials into uncontaminated areas. All site personnel should limit contact with contaminated materials or equipment in order to reduce the need for extensive decontamination. Decontamination of equipment and personnel potentially exposed to lead must be in accordance with Title 8 CCR 5192(k).

Equipment and materials used in the decontamination process may include the following:

- High pressure/hot water cleaning using only potable water/fire water.
- Decontamination trailer.
- Phosphate-free detergent.
- Five-gallon bucket.
- Potable water.
- Distilled water.
- Paper towels.
- Brushes.

### 12.1 Personnel Decontamination

Personnel decontamination will be applied to all individuals that enter the Exclusion Zones and contact contaminants, and injured personnel will be decontaminated by supervisors and SSO if required.

The following procedures will be utilized for personnel decontamination:

- Clean rubber boots with a mixture of water and a boot wash solution followed by a clean water rinse.
- Respirators will be thoroughly cleaned with soap and water. The respirator face piece, straps, valves, and covers must be thoroughly cleaned at the end of each work shift and ready for use prior to the next shift.

- Respirator parts may be disinfected with a solution of bleach and water or by using a spray disinfectant.
- Personnel should wash hands and any skin that may have come in contact with contaminated materials at the end of each shift with soap and water. A decontamination trailer will be established in the CRZ. The decontamination trailer will be set up with a clean side and dirty side with an area to store clothing.
- Contaminated PPE and disposable towels and wipes shall be collected in an appropriate container and disposed of according to applicable regulations.
- Wash water or other decontamination fluids shall be collected in an appropriate container and disposed of according to applicable regulations.

### 12.3 Emergency Decontamination

If an injured employee has gross contamination, emergency decontamination may be required prior to transportation to a treatment facility. Steps for emergency decontamination are:

- Remove the outer protective layer of clothing (if employee has a suspected neck/back injury, carefully cut the clothing off so as to not cause further injury).
- Wipe off any remaining gross contamination with clean clothes/towels.
- An AIS employee must accompany the injured person to the hospital to provide information to the examining/treating medical professional. The accompanying employee must bring the SDSs (if applicable) for the COCs involved with site work. The accompanying employee should be prepared to provide information regarding site conditions, potential exposures, and a description of the incident causing the injury or exposure.

### 12.2 Equipment Decontamination

The following will be required for equipment and tool decontamination:

- Before leaving the work area, excess contamination will be removed from the equipment and tools and placed in approved, properly labeled containers.
- Decontamination of equipment will be performed in a designated decontamination area.
- Disposal of all solids and liquids collected within the decontamination area will be in accordance with applicable regulations.

## 13.0 EMERGENCY RESPONSE PLAN

The SSO has primary responsibility handling emergency situations while deconstruction related activities are occurring at the site. This includes taking appropriate measures to ensure the health and safety of site personnel and the public. The SSO will be responsible for evacuating any person and providing decontamination, and arranging for medical treatment or first aid for any person injured or requiring medical attention.

Possible actions may involve the evacuation of personnel from the site area and verifying that corrective measures have been implemented, appropriate authorities notified, and follow-up reports completed.

If the SSO is not available, the PM or other AIS field staff will assume the SSO's responsibilities. All site personnel will assist as directed by the SSO in case of an emergency.

Contributing factor initiating emergency response (process, material, weather): Emergency response would most likely be triggered by a severe injury/medical emergency sustained by an AIS team member, a subcontractor, or member of the public. Two other scenarios would be equipment fire (heavy equipment or vehicle), or structural failure of tent structure

### 13.1 Emergency Alarms

During pre-mobilization meetings, the PM and SSO in cooperation with EXIDE will develop appropriate means of transmitting emergency alarms. Site specific methods developed will be added to this HASP and all personnel entering the site will be informed of the alarms and communication methods. Methods for communicating site emergencies will include but are not limited to the use of air horns or radios.

### 13.2 Evacuation Procedures and Routes

Evacuation alarms and routes will be determined cooperatively between EXIDE and AIS during project mobilization. Evacuation plans will be updated as needed to reflect changes in plant access and traffic patterns due to work activities. Changes in evacuation routes or alarms will be communicated to all parties on site via daily safety meetings and on-site postings. Please see the evacuation route provided in section 1.10 of this plan.

In the event of an emergency requiring evacuation to an Assembly Point, the AIS SSO will be responsible for accounting for the presence of all project team members and subcontractors on-site at the time of the emergency. When evacuating, it is important to be aware of the prevailing wind direction and evacuate upwind or crosswind. SSO and PM will make a decision to shelter in place or take further evacuation measures. All employees will remain at muster point until further direction is given by EXIDE or AIS SSO/PM to return to work or leave the site.

### 13.3 Responding to Emergencies

In the event an actual or suspected incident where personal injury or illness occurs, the SSO should take the following actions sequentially as listed:

- Sound Air Horn .
- Contact PM via radio or cell phone.
- Don appropriate PPE.
- Remove the exposed or injured person(s) from immediate danger.
- Decontaminate affected personnel as appropriate.
- Obtain ambulance transport to the local hospital in the event of any injury or illness deemed to require medical surveillance or treatment.
- For a minor injury drive the injured employee to the U.S Health Works Medical Clinic.
- Evacuate other personnel until it is safe for work to resume.

While the above actions are taking place, site personnel shall:

- Shut down and de-energize all equipment in area.
- Stop all labor and work and secure site.
- Report to the field office unless needed for the emergency response.
- In the event of an ambulance, go to the nearest intersection and flag medical services to site.
- Wait for work to be resumed by SSO or PM.

### 13.4 Reporting Emergencies

At the earliest time practicable following the occurrence of the emergency situation, the SSO will contact the PM and the EXIDE representative to advise them of the situation. The PM will then be responsible for immediately inform the following parties about the emergency:

- Injured/involved personnel's supervisor.
- AIS Health and Safety Director.
- AIS Human Resources.

In the case of an incident, the SSO, with the cooperation of the H&S Director, will promptly begin formal documentation and investigation into the root causes of the Incident following the occurrence of the incident. Results and learnings from incidents and investigations will be shared with AIS corporate management group, EXIDE and also provided to other parties working on site for mutual benefit.

Reporting will include requirements per Cal/OSHA Title 8 section 342:

“(a) Every employer shall report immediately by telephone or telegraph to the nearest District Office of the Division of Occupational Safety and Health any serious injury or illness, or death, of an employee occurring in a place of employment or in connection with any employment.

Immediately means as soon as practically possible but not longer than 8 hours after the employer knows or with diligent inquiry would have known of the death or serious injury or illness. If the employer can demonstrate that exigent circumstances exist, the time frame for the report may be made no longer than 24 hours after the incident.

Serious injury or illness is defined in section 330(h), Title 8, California Administrative Code.

(b) Whenever a state, county, or local fire or police agency is called to an accident involving an employee covered by this part in which a serious injury, or illness, or death occurs, the nearest office of the Division of Occupational Safety and Health shall be notified by telephone immediately by the responding agency.

(c) When making such report, whether by telephone or telegraph, the reporting party shall include the following information, if available:

- (1) Time and date of accident.
- (2) Employer's name, address and telephone number.
- (3) Name and job title, or badge number of person reporting the accident.

- (4) Address of site of accident or event.
  - (5) Name of person to contact at site of accident.
  - (6) Name and address of injured employee(s).
  - (7) Nature of injury.
  - (8) Location where injured employee(s) was (were) moved to.
  - (9) List and identity of other law enforcement agencies present at the site of accident.
  - (10) Description of accident and whether the accident scene or instrumentality has been altered.
- (d) The reporting in (a) and (b) above, is in addition to any other reports required by law and may be made by any person authorized by the employers, state, county, or local agencies to make such reports.”

### 13.5 Restarting Work

The SSO and PM will determine when it is safe to resume work at the site following an emergency. Note that if there is any doubt regarding the safe condition of the area, work will not recommence until all safety issues are resolved. Communicate plan for restart to EXIDE representative

## 14.0 SPILL PREVENTION AND RESPONSE

The emergency spill plan for this project will involve the use of preventative measures in order to reduce the potential for environmental releases. These preventative measures may include the following:

- Equipment inspection.
- Staging equipment on containment pads.
- Containment for fueling equipment.
- General housekeeping practices.

A spill kit will be located adjacent to any area used to service and/or fuel equipment. All major service to equipment will be performed offsite or on a spill pad. If project activities involve the use of drums or other containers, the drums or containers will meet the appropriate DOT regulations and will be inspected and their integrity assured prior to being moved. Operations will be organized so as to minimize drum or container movement. Drums or containers that cannot be moved without failure will be over packed into an appropriate container.

Ensure all chemical containers on site are labeled and lids are secured when not in use. All container labeling must be in accordance with EXIDE labeling requirements. When transferring chemicals from one container to another, or when refueling vehicles or equipment, provide containment beneath the transfer point to capture potential spills. In the event of a spill, the PM and the EXIDE representative must be contacted (see Emergency Contact List). Immediately report all chemical spills.

## 15.0 SITE SAFETY BRIEFINGS

An initial review of the site-specific HASP will be held either prior to mobilization or after mobilization but prior to commencing work at the site to communicate HASP details and answer questions to individuals working at the site. With all competent persons required to attend, the following topics will be addressed during the briefing:

- Names of the SSO and any designated alternate.
- Hazardous chemicals that may be encountered during on-site activities.
- Physical hazards that may be encountered on-site.
- Special training requirements and Safe Work Practices.
- Work tasks.
- Emergency communication signals, codes, and location of emergency contact information.
- Emergency procedures for safety events, fires, and hazardous material incidents.
- Emergency evacuation routes.
- Potential Biological hazards.

### 15.1 Daily Safety Meeting

A daily safety meeting will be conducted each morning. The daily safety meeting will include a discussion of the following health & safety-related topics, among others:

- “Plan of the Day” Who is doing what, where and how.
- Dust Suppression for the day, and how it relates to the plan.
- The potential for overlapping site operations.
- Changes to the HASP or JHAs.
- Public Safety.
- Site Security.
- Visitors and Inspectors.
- Traffic Control.
- Communication Chain.
- Discussion of recent Incidents or safety observations.
- Comments from the project personnel.

The meetings will be documented on the Site Safety Meeting Form and daily activities will be Risk Assessed and captured on the associated JHA.

### 15.2 Auditing and HASP Revisions

Selected project field activities and project files shall be audited periodically. A full site audit for conformance with the HASP will occur at least once per year for projects with field duration of one year or longer. Full site audits may also be conducted for shorter duration projects. Project documentation audits may be conducted periodically for shorter term projects.



Revisions made to the site HASP in response to audit feedback, lessons learned from incidents, or other reasons will be explained to all site personnel at the first daily safety meeting following the institution of the HASP revision.

## Appendix – A

### Health and Safety Acknowledgement Form

## Acknowledgement

I have read, understood, and agree with the information set forth in this health and safety plan (HASP), and will follow guidance in the plan. I understand the training and medical monitoring requirements (if any) for conducting activities covered by this HASP and have met these requirements.

AIS has prepared this plan solely for the purpose of protecting the health and safety of AIS employees. Subcontractors, visitors, and others at the site are required to follow provisions in this document at a minimum, but must refer to the organization's health and safety program for their protection.

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